



DUKE  
UNIVERSITY



LIBRARY







**BULLETIN**  
**OF**  
**DUKE UNIVERSITY**



**The School of Forestry**

**ANNOUNCEMENTS FOR 1951-52**

**VOLUME 23**

**January, 1951**

**NUMBER 3-D**

# Annual Bulletins

For GENERAL BULLETIN of Duke University, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF UNDERGRADUATE INSTRUCTION, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF THE COLLEGE OF ENGINEERING, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES, apply to *The Dean of the Graduate School*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF LAW, apply to *The Dean of the School of Law*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF MEDICINE, apply to *The Dean of the School of Medicine*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF NURSING, apply to *The Dean of the School of Nursing*, Duke University, Durham, N. C.

For BULLETIN OF THE DIVINITY SCHOOL, apply to *The Dean of the Divinity School*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF FORESTRY, apply to *The Dean of the School of Forestry*, Duke University, Durham, N. C.

For BULLETIN OF THE SUMMER SESSION, apply to *The Director of the Summer Session*, Duke University, Durham, N. C.

Published by Duke University monthly except in July, August, September, and December. Entered as second-class matter March 25, 1929, at the Post Office of Durham, North Carolina, under the Act of August 24, 1912.

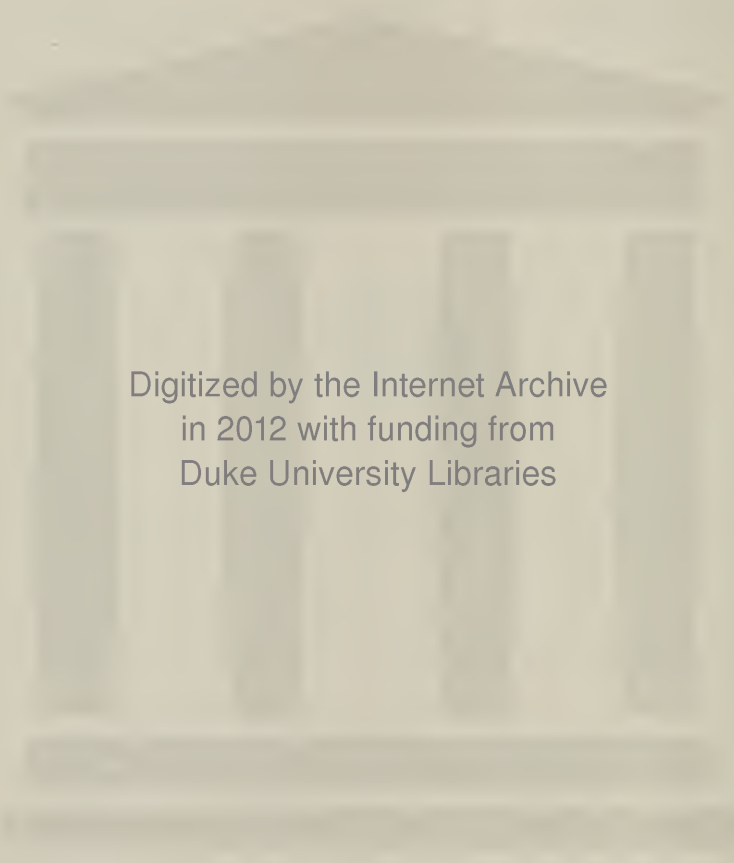
BULLETIN<sup>s</sup>  
OF  
DUKE UNIVERSITY

THE SCHOOL OF FORESTRY



ANNOUNCEMENTS FOR 1951-52

DURHAM, NORTH CAROLINA  
1951



Digitized by the Internet Archive  
in 2012 with funding from  
Duke University Libraries

Tr. R.  
 378.756  
 D877 HA  
 v. 23  
 1950/51

# Contents



	PAGE
SCHOOL OF FORESTRY CALENDAR.....	4
OFFICERS OF ADMINISTRATION.....	5
FACULTY OF THE SCHOOL OF FORESTRY.....	6
DUKE FOREST STAFF.....	6
FORESTRY IN DUKE UNIVERSITY: General Statement.....	8
Educational Facilities.....	9
The Duke Forest.....	10
The Arboretum.....	13
FELLOWSHIPS, SCHOLARSHIPS, AND GRADUATE ASSISTANTSHIPS IN FORESTRY.....	15
TUITION, FEES, AND EXPENSES.....	17
REQUIREMENTS FOR ADMISSION TO THE SCHOOL OF FORESTRY.....	19
GRADUATE RECORD EXAMINATION.....	21
REQUIREMENTS FOR THE DEGREE OF MASTER OF FORESTRY.....	22
REQUIREMENTS FOR THE DEGREE OF DOCTOR OF FORESTRY.....	24
FORESTRY IN THE GRADUATE SCHOOL.....	28
COURSES AND SUBJECTS OF INSTRUCTION.....	29
ENROLLMENT, 1950-51.....	34

603484

# School of Forestry Calendar



1951

- |       |      |  |
|-------|------|--|
| June  | 12   | Tuesday—Registration of students for summer work in forestry.  |
| June  | 13   | Wednesday—Field work in Plane Surveying (C.E. S110) begins.  |
| July  | 11   | Wednesday—Field work in Forest Surveying (For. S150) begins.   |
| Aug.  | 15   | Wednesday—Field work in Forest Mensuration (For. S151) begins.   |
| Sept. | 18   | Tuesday—Registration of students in the School of Forestry.  |
| Sept. | 19   | Wednesday—Registration of students in the School of Forestry.  |
| Sept. | 20   | Thursday—Instruction begins in the School of Forestry.   |
| Oct.  | 1-6  | French examinations for candidates for doctors degrees. Candidates register in the Graduate Office for these examinations not later than September 25. |
| Oct.  | 8-13 | German examinations for candidates for doctors degrees. Candidates register in the Graduate Office for these examinations not later than October 2.    |
| Nov.  | 22   | Thursday—Thanksgiving Day; a holiday.  |
| Dec.  | 11   | Tuesday—Founders Day.  |
| Dec.  | 20   | Thursday, 5:00 P.M.—Christmas recess begins.   |

1952

- |       |       |  |
|-------|-------|--|
| Jan.  | 3     | Thursday, 8:00 A.M.—Instruction is resumed.  |
| Jan.  | 16    | Wednesday—School of Forestry mid-year examinations begin.  |
| Jan.  | 26    | Saturday—School of Forestry mid-year examinations end.   |
| Jan.  | 28    | Monday—Registration of students in the School of Forestry.   |
| Jan.  | 30    | Wednesday—Second semester begins.  |
| Feb.  | 19-23 | French examinations for candidates for doctors degrees. Candidates register in the Graduate Office for these examinations not later than February 9. |
| March | 10-15 | German examinations for candidates for doctors degrees. Candidates register in the Graduate Office for these examinations not later than March 3.    |
| March | 22    | Saturday, 12:30 P.M.—Spring vacation begins. School of Forestry Coastal Plain field work begins.   |
| March | 31    | Monday, 8:00 A.M.—Instruction is resumed.  |
| April | 7     | Monday, 8:00 A.M.—Coastal Plain field work ends.   |
| April | 15    | Last day for submitting Doctor of Forestry theses.   |
| May   | 15    | Last day for submitting Master of Forestry theses.   |
| May   | 19    | Monday—School of Forestry final examinations begin.  |
| May   | 29    | Thursday—School of Forestry final examinations end.  |
| May   | 31    | Saturday—Commencement opens.   |
| June  | 1     | Sunday—Commencement sermon.  |
| June  | 2     | Monday—Commencement address and graduating exercises.  |



# Officers of Administration



EDENS, ARTHUR HOLLIS, A.B., A.M., Ph.D., LL.D. <i>President of the University</i>	West Campus
FLOWERS, ROBERT LEE, A.M., LL.D. <i>Chancellor of the University</i>	West Campus
WANNAMAKER, WILLIAM HANE, A.B., A.M., Litt.D. <i>Vice-Chancellor of the University</i>	West Campus
GROSS, PAUL MAGNUS, B.S., A.M., Ph.D. <i>Vice-President in the Educational Division</i>	Hope Valley
BROWER, ALFRED SMITH, A.B. <i>Business Manager and Comptroller</i>	1550 Hermitage Court
MARKHAM, CHARLES BLACKWELL, A.B., A.M. <i>Treasurer</i>	204 Dillard Street
JORDAN, CHARLES EDWARD, A.B., LL.D. <i>Vice-President and Secretary</i>	813 Vickers Avenue
KORSTIAN, CLARENCE FERDINAND, B.S.F., M.F., M.A., Ph.D. <i>Dean of the School of Forestry</i>	4 Sylvan Road

## COMMITTEE OF THE BOARD OF TRUSTEES ON THE SCHOOL OF FORESTRY

R. G. CHERRY, B. F. FEW, N. E. EDGERTON, J. R. SMITH

# Faculty of the School of Forestry



ANDERSON, ROGER FABIAN, B.S., M.S., Ph.D. <i>Associate Professor of Forest Entomology</i>	1212 Sixth Street
*BEAL, JAMES ALLEN, B.S., M.S., Ph.D. <i>Professor of Forest Entomology</i>	2232 Cranford Road
COILE, THEODORE STANLEY, B.S.F., M.F., Ph.D. <i>Professor of Forest Soils</i>	Laurel Ridge Farm, Hillsboro Road
HARRAR, ELLWOOD SCOTT, B.S., M.S., Ph.D. <i>Professor of Wood Technology</i>	2228 Cranford Road
KORSTIAN, CLARENCE FERDINAND, B.S.F., M.F., M.A., Ph.D. <i>Professor of Silviculture</i>	4 Sylvan Road
KRAMER, PAUL JACKSON, A.B., M.Sc., Ph.D. <i>Professor of Botany</i>	2251 Cranford Road
RUDOLPH, VICTOR JOHN, B.S., M.F., D.F. <i>Assistant Professor of Forest Management</i>	617 Swift Avenue
SCHUMACHER, FRANCIS XAVIER, B.S. <i>Professor of Forestry</i>	6 Sylvan Road
SULLIVAN, EDWARD THOMAS, B.S.F., M.F. <i>Visiting Instructor in Forest Economics</i>	1105 Virginia Avenue
**THOMSON, ROY BERTRAND, B.S., M.F., Ph.D. <i>Professor of Forest Economics</i>	2243 Cranford Road
WACKERMAN, ALBERT EDWARD, B.S., M.F. <i>Professor of Forest Utilization</i>	Dover Road, Hope Valley
WOLF, FREDERICK ADOLPHUS, A.B., A.M., Ph.D. <i>Professor of Botany</i>	924 Urban Avenue

## *Duke Forest Staff*

KORSTIAN, CLARENCE FERDINAND, B.S.F., M.F., M.A., Ph.D. <i>Director</i>	4 Sylvan Road
RUDOLPH, VICTOR JOHN, B.S., M.F., D.F. <i>Assistant Director</i>	617 Swift Avenue
BLACKMON, MANLY RANKIN <i>Superintendent</i>	2321 Erwin Road
SMITH, BERNARD F., B.S.F., M.F. <i>Forest Assistant</i>	903 W. Club Boulevard
***CARVELL, KENNETH L., A.B., M.F. <i>Forest Assistant</i>	818 Wilkerson Avenue

\* Resigned September 1, 1950.

\*\* Died July 27, 1950.

\*\*\* Employed part-time.

\*RAY, PHILIP L., B.S.  
*Forest Assistant*

Camp Butner, N. C.

MAUPIN, MRS. HARRIET G.  
*Bookkeeper*

1008 N. Gregson Street

### *Duke Arboretum*

HARRAR, ELLWOOD SCOTT, B.S., M.S., Ph.D.  
*In Charge*

2228 Cranford Road

### *Assistants in School Administration*

HARMON, MRS. IRENE R.  
*Recorder and Secretary to the Dean*

304 N. Maple Street

McMANNEN, MRS. NANCY A.  
*Secretary*

1905 Hart Street

BROWN, MRS. BETTY W.  
*Secretary*

2416 Huron Circle

HICKS, MRS. JULIE C.  
*Statistical Clerk*

815 Green Street

\* Employed part-time.

# Forestry in Duke University



## *General Statement*

DUKE UNIVERSITY, located at Durham, North Carolina, comprises Trinity College, the Woman's College, the College of Engineering, the Graduate School of Arts and Sciences, the Divinity School, and the professional schools of Forestry, Law, Medicine, and Nursing. Nearly every state of the Union and several nations are represented in the student body of more than five thousand, not including the enrollment in the Summer Session.

The University goes back in its origin to 1838, when Union Institute was founded in Randolph County by the Methodists and Friends. In 1851 the institution became Normal College, one of the first schools in America for the training of teachers. In 1859 the name was changed to Trinity College and so continued until 1924, when the College became a part of Duke University.

By virtue of an indenture of trust, executed December 11, 1924, by James Buchanan Duke, a great benefaction was placed at the disposal of humanity by providing for hospitalization, church work in rural communities, and education. The principal feature of the educational provision was the creation of Duke University.

The University occupies two campuses. The Woman's College campus, with its 108 acres, was formerly the campus of Trinity College. About a mile to the west are the new units of the University. The new campus, totaling 467 acres, also known as the West Campus, was first occupied in September, 1930.

Forestry in Duke University began early in 1931, when, through placing the Duke Forest under intensive management for forestry purposes, a substantial beginning was made in laying the foundation for educational work and research in forestry.

An academic-forestry curriculum, designed for students intent upon pursuing the study of forestry, particularly as a profession after graduation, was organized in Trinity College of Duke University in 1932 (see *Announcement on Undergraduate Instruction in Duke University*). This four-year course of study provides only for instruction in fundamental and auxiliary subjects basic to a proper understanding of the highly specialized work in technical forestry. Duke University offers no professional degree in technical forestry available to undergraduates.

Training in technical forestry leading to the professional degrees, Master of Forestry and Doctor of Forestry, is offered in the School of Forestry, and is open to graduates of the academic-forestry curriculum in Trinity College and to graduates of recognized scientific schools or colleges, universities, and professional schools of forestry.

Duke University is also prepared to offer, through the Graduate School of Arts and Sciences, graduate work in the more scientific aspects of forestry leading to the Master of Arts and Doctor of Philosophy degrees. This work is available to graduates of schools of forestry of recognized standing, and to college or university graduates holding the Bachelor's degree with their major work in appropriate scientific subjects. Undergraduate subjects which the college student, who does not have forestry training but who is contemplating work toward either degree in forestry, should take in preparation for this work may be illustrated as follows: At least two full years in botany, including general morphology or anatomy, the taxonomy, physiology, and ecology of plants; at least one course in zoology or general biology; courses in chemistry, physics, geology, economics, mathematics; and at least two years of French or German.

Several staff members of the Southeastern Forest Experiment Station are engaged in co-operative research projects in the Duke Forest. Specialists from this station and other prominent members of the U. S. Forest Service and representatives of forest and wood-using industries give occasional scheduled lectures at the School.

### *Educational Facilities*

The School of Forestry is located in the Social Science and Biology Buildings on the West Campus. The School is provided with instruments and tools for use in both field and laboratory work in silvics, silviculture, harvesting, and forest mensuration. Modern surveying instruments and accessory equipment are available for work in forest surveying.

Fully equipped laboratories are provided for work in wood anatomy and properties, timber mechanics, and bonding of wood. A modern forest soils laboratory equipped for physical and chemical studies is available. In the field of seasoning and preservation of wood a commercial-sized, single-compartment dry kiln and a fully equipped experimental pressure treating cylinder are available for instruction and research.

Facilities are also available for advanced work in plant physiology, plant anatomy, plant taxonomy, genetics, plant ecology, plant pathology, and the several branches of zoology.

The School of Forestry Library contains a growing collection of material on forestry and related subjects. It includes important books

and periodicals in English and in French, German, and other foreign languages. The Library is well provided with American material, including Federal and State documents and reports. Over 150 periodicals and serials of importance in forestry and related fields are received by subscription or exchange.

Greenhouses, connected to the Biology Building through a soil-storage and work room, provide adequate space for experimental work.

A nursery has been established by the University for joint use of the Sarah P. Duke Floral Garden, the Botany Department, and the School of Forestry. The forestry section of this nursery is used mainly for the growing of planting stock for the Arboretum and trees needed for research or other special purposes.

West Virginia Pulp and Paper Company has made available to Duke University a field headquarters for work in forests of the South Atlantic Coastal Plain located 18 miles northwest of Summerville, South Carolina. This company has extensive forest holdings under close supervision of a staff of technical foresters in South Carolina and permits access to its lands for instruction and research in forestry and allied fields. This headquarters camp with modern facilities for as many as 45 men is used as a base primarily for utilization work each spring and for special work in silviculture. The quarters may be available at other times for students and faculty members of the Duke School of Forestry working on special problems or doing advanced work in any of the fields of forestry concerned with coastal plain problems. The establishment of this headquarters camp in the coastal plain region makes it possible for the School of Forestry to provide instruction and conduct research in this important forest area in which many privately owned forests as well as public forests are intensively managed for the production and utilization of a wide range of forest products. The Southern Railway Demonstration Forest is within easy reach of this center and will also be available for work, particularly with longleaf pine.

The School sponsors occasional lectures on forestry and conservation by speakers of national reputation.

An active Forestry Club is maintained as a student organization to bring the members of the School and students in the undergraduate academic-forestry curriculum into closer contact and to afford opportunities for extracurricular activities not otherwise available.

### *The Duke Forest*

The Duke Forest, located in Durham and Orange counties, North Carolina, consists of five main units: namely, the Durham, New Hope Creek, Hillsboro, Eno, and Blackwood divisions. Early in the development of Duke University it was recognized that the possession of such



an area offered an unusual opportunity for the development of educational work in forestry.

Situated on the lower Piedmont plateau at elevations ranging from 280 to 650 feet, and composed of second-growth shortleaf and loblolly pines, oak, gum, hickory, maple, yellow poplar, ash, and other hardwoods, the Forest is representative of the various types of timber growth found throughout the region. Over a hundred different species of trees are found within or near the Forest. The land is rolling and there is relatively little rock outcrop, swamp, or other land of low productivity for timber growing. The total area of the Forest proper, exclusive of the University campus, is approximately eight thousand acres.

In developing the Duke Forest the following objectives are being emphasized:

1. Demonstration of the various methods of timber growing, silvicultural treatment, and forest management applicable to the region.

2. Development as an experimental forest for research in the problems of timber growing and in the sciences basic thereto. In spite of the present timber situation and the accompanying economic ills, the technical and scientific knowledge required to handle forest crops efficiently on a permanent basis is still largely lacking. The Duke Forest affords a place where studies may be carried on to augment this knowledge for the large region of which the local forest and soil conditions are representative.

3. To serve as an outdoor laboratory where field work can be carried on by forestry students under the guidance of the Forestry Faculty. One of the most difficult problems in forestry education is to bring the students into contact with the realities of professional activities. With all operations in the Forest, both routine and research, recorded annually, it is possible for a qualified man to get in a short time a degree of practical knowledge or technical expertness which only an organized forest can provide.

The Duke Forest is particularly well located to serve as a field laboratory, since most of it is adjacent and easily accessible to the University campus. In fact, the Durham division practically surrounds the West Campus, which was laid out in one corner of the Forest. A paved State highway runs lengthwise through the Durham division, and several good roads cross the Forest. About fifteen miles of improved woods roads make all parts of the Forest readily accessible. A five-minute walk will take one well into the Forest, and any part of the Durham or New Hope Creek divisions can be reached by automobile in from ten to twenty minutes. At few other places in America can be found provision for forestry training and research which includes the necessary forest literally at the door of a large university with its instructional, laboratory, and library facilities.

Approximately 1,400 acres of the Forest was open land, which had been under cultivation prior to the establishment of the Forest. Such of the open land as was not restocking naturally to forest trees was planted. Arbitrarily by mixing species and varying the spacing between the trees in the plantations, the foundation was laid for future research into many perplexing problems, such as species relationships and requirements, the most desirable spacing and species to use in this region, and the survival and relative rates of growth of the different species of trees. To date approximately 1,100 acres of such plantations have been established. Pulp-wood thinnings on a commercial basis are now being made in a number of the older pine plantations.

A large number of permanent sample plots, ranging in size from one-tenth acre to over one acre, have been laid out in the Forest to study various problems. The plots are distributed through all the forest types, and range in purpose from studies of the effects of various silvicultural practices to studies of rates of growth and yields of the different timber types. Accurate records are kept on all this work, which will provide excellent material for student research. In the future many of these plots can also be used to demonstrate desirable forestry practices.

The development of the Forest as a demonstration of practical forest management is well advanced. Forest type and timber stand maps are available for each of four divisions except for recently acquired areas. A detailed soils map for the entire area is being prepared. Except for very recent acquisitions, each division has been subdivided into permanent compartments, and plans for the silvicultural treatment of each stand and working group have been formulated. The second 10-year inventory of the Forest resources has been completed and the results of management practices during the first decade are being assembled and will soon be available.

Cutting operations within the limits of annual growth are being carried on, and, as markets for definite products are developed or expanded, such operations will be increased. To date, approximately 1,000 acres in the pine types have been thinned. These thinnings serve the dual purpose of contributing to the operation of the Forest as a going business and of demonstrating sound forestry practices. An efficient fire protection organization has been developed in co-operation with the State and Federal governments, and forest fire losses are being held to a minimum. In managing the Forest, public recreation activities are recognized. Several recreation areas have been established, and over fifteen thousand picnickers, hikers, and horseback riders use the area annually. The Durham and New Hope Creek divisions of the Forest, together with several hundred acres of neighboring privately owned land, are incorporated in an Auxiliary State Game Refuge to give the necessary protection which will ultimately result



in an increased amount of game in the surrounding territory. Records are being maintained of all activities in the Forest, and these records will become increasingly useful as they are improved as a result of further experience and research. With the diversification and expansion of activities now going on, students have an opportunity to study an operating forest in all its phases and to obtain a grasp of the proper balance between theory and practice.

The Forest is admirably located for research in forest soils. An unusually large number of different soil conditions occur in the Forest because of the diversity of parent rock, topography, and past land culture. Major soil differences are due to the nature of the parent material which includes the basic rock of the Carolina Slate formation, granites, Triassic sedimentary rock, and many types of basic intrusives.

An exceptionally good opportunity exists for the conduct of forest research by graduate students due to the wide range in forest types, ages, and soil conditions within the Forest and its proximity to the laboratories, greenhouses, and other scientific equipment and library facilities of the University. Research is being conducted on special problems, particularly in the fields of silvics, forest soils, forest-tree physiology, forest entomology, forest pathology, silviculture, forest management, and wood technology. The Forest is used not only for research in forestry but also for research in forest biology by members of allied departments.

### *The Arboretum*

Of outstanding value in the teaching of both forestry and botany in the future is the provision for the development of an arboretum. In their annual meeting on June 4, 1934, the Board of Trustees of Duke University, upon the recommendation of their Forestry Committee, voted to set aside permanently an area of over three hundred acres in the Forest to be used for arboretum purposes. The area lies adjacent to the main University campus immediately across the road from the Chapel.

Through the generosity of the late W. W. Flowers, of New York, a member of the Class of 1894 and a Trustee of the University, it has been possible to develop preliminary plans and to make a number of plantings. This is naturally a long-time project, and many years will elapse before the Arboretum will be most useful and most attractive. The University Trustees' Committee on Forestry in its report to the Board refers to the Arboretum as follows:

"The Arboretum should serve as a station for the study of trees and woody plants as individuals and in small groups in their scientific relations, economic properties, and cultural characteristics, require-

ments, and possibilities. It should render an economic service by acting as a research laboratory where trees and shrubs can be studied from the viewpoint of a fuller utilization of their commercial possibilities. It should render a cultural service by serving as a center where foresters, landscape architects, nurserymen, gardeners, and the general public may increase their knowledge of indigenous trees and shrubs and where they may become acquainted with the foreign species that can be grown here. Within the University the Arboretum will supply living specimens and material for several branches of botany and forestry."

The development of the Arboretum will proceed along these lines as rapidly as available funds and planting stock will permit.

# Fellowships, Scholarships, and Graduate Assistantships in Forestry



A NUMBER of fellowships, scholarships, and research assistantships are available to men who offer promise of becoming leaders in the forestry profession. These will be awarded for high character and marked scholastic ability as judged by education, experience, and personal references.

Holders of the awards will pay tuition and such additional fees as are regularly required.

The awards are of three classes with stipends and special conditions as follows:

(1) Fellowships of \$600 to \$1,000 each. Each recipient must have previously completed work equivalent to that required at Duke University for a Master's degree with major in forestry or in a discipline basic to forestry. He will devote his time to an approved program of study and research in any of the branches of forestry. He is expected to become a candidate for the degree of Doctor of Forestry or Doctor of Philosophy.

(2) Scholarships of \$250 to \$700 each. Each recipient will normally devote his time to an approved program of study leading to the degree of Master of Forestry or Master of Arts with a major in forestry.

Holders of fellowships and scholarships will be expected to do a limited amount of assisting.

(3) Graduate assistantships of \$1,000 each. Each recipient will devote half-time to research or other work of the School of Forestry. He will be permitted to enroll for not more than 20 semester hours in a school year on a program of study, or study and research, leading to the degree of Master of Forestry, Master of Arts, Doctor of Forestry, or Doctor of Philosophy.

Each year one fellowship in the amount of \$1,200 is awarded by the Union Bag and Paper Corporation, of Savannah, Georgia, upon the recommendation of a special awards committee, to a graduate forester, selected on the basis of merit, ability and interest in the field of industrial forestry; for graduate study at the School of Forestry of Duke University. A fund of \$400.00 in addition to the fellowship stipend is available for payment of actual expenses incurred in the conduct of the recipient's research.

To be eligible for the fellowship an applicant must meet the following qualifications:

a. He must be a graduate of the George Foster Peabody School of Forestry of the University of Georgia; or a resident of the State of Georgia and have earned at least a bachelor's degree in forestry at another institution of higher learning.

b. He must have the quality point grade average required for admission to the School of Forestry.

c. He must be interested in a career in a field of forestry that is concerned with the management, harvesting, or utilization of industrial forest properties, particularly in the South.

d. He must be interested in a career in a field of forestry that is of creditable graduate work in forestry. This is evaluated by the awards committee on the basis of letters of recommendation, scholastic standing, a personal interview, and in such other ways as the committee may specify.

Those interested in applying for the Union Bag and Paper Corporation Forestry Fellowship should write Professor A. E. Wackerman, Secretary of the Awards Committee, for application forms or for further information. Applications, with supporting papers, must be in the hands of the Committee not later than March 1 preceding the academic year for which the Fellowship will be granted. Announcement of the award will be made not later than April 1 of the same year.

The following arrangements are common to all fellowships, scholarships and research assistantships in forestry:

(1) Each applicant must have received a Bachelor's degree from an acceptable professional school of forestry or must be a graduate of a recognized college or university. If an applicant is not a graduate of a school of forestry, he must have had major work in botany or soil science and in the allied basic sciences. Each applicant must show reasonably high scholarship. Preference will be given to men who have already obtained technical or professional training in forestry.

(2) It is highly desirable that each applicant state as specifically as possible the field in which he wishes to study. The definite selection of a major field of work—one that is specific in purpose and involves training both in fundamentals and in technique—is very helpful to the Committee on Awards.

(3) Application blanks for fellowships, scholarships, and research assistantships may be obtained by writing to the Dean of the School of Forestry, Duke University, Durham, North Carolina. When the blank has been filled out by the applicant, it should be returned to the above address, and an *official transcript of record* showing college or university credits must accompany it or be forwarded promptly. The application and transcript must be filed not later than March 1 for consideration for the following academic year. In case vacancies occur, applications submitted on a later date may be considered.

# Tuition, Fees and Expenses



THE following tables show the general fees and charges collected from all students. All fees for each semester are due and payable, unless otherwise specified, at the time of registration at the beginning of that semester, and no student is admitted to classes until arrangements have been made with the Treasurer of the University for the settlement of fees.

## *General Fees*

Tuition, per semester .....	\$175.00
General Fee, per semester .....	60.00

Due to rising costs a readjustment in charges is being considered. In the event of an adjustment applicants will be notified.

**TRANSCRIPTS:** A student desiring to transfer from Duke University to another institution is entitled to one transcript of his record. A charge of one dollar is made for each additional copy.

**PAYMENTS TO FELLOWS AND SCHOLARS:** Payments by the University of stipends to fellows, research assistants, and scholars are made in four installments, on November 25, January 25, March 25, and May 25. Fellows and scholars are required to pay the regular tuition fee and such additional fees as are ordinarily required of graduate students.

## *Rooms and Conditions of Renting Them*

### ROOM-RENT FOR MEN OF DUKE UNIVERSITY

Single room, per semester .....	\$87.50
Double room, per student, per semester .....	62.50

Rooms may be reserved only for applicants who have been officially accepted by the University. A fee of \$25.00 is required for reservation. This fee is deducted from the room rental charge at the time of registration for the semester; it is not refunded unless application for the refund is made 60 days prior to the registration date of the semester.

A resident student in order to retain his room for the succeeding semester must make application, accompanied by a reservation fee of \$25.00. All rooms which have not been reserved on or before an announced date will be considered vacant for the succeeding semester and will be reserved in the order in which applications are made.



Rooms are rented for no shorter period than one semester unless by special arrangement with the Housing Bureau. A period of occupancy other than a semester and without special arrangement will be charged at a minimum rate of \$1.00 per day.

The exchange of rooms may be arranged at the Housing Bureau within 15 days after the official opening of either semester of the school term. A charge of two dollars (\$2.00) will be made for the exchange of rooms after the periods allowed for such exchange. Persons exchanging rooms without the approval of the Housing Bureau will be subject to charges for both rooms.

The authorities of the University do not assume the responsibility for the personnel selected as roommates. Each student is urged to select the roommate when the room is reserved.

**DORMITORIES FOR MEN:** On the West Campus there are four groups of dormitories, Craven, Crowell, Kilgo, and Few. Each group forms a quadrangle enclosing a court. Few Quadrangle is reserved especially for the use of graduate and professional school students.

**BOARDING ACCOMMODATIONS:** *West Campus.*—Food service is cafeteria style. The cost of meals approximates \$1.25 to \$1.75 per day depending upon the need and taste of the individual. The dining facilities in the Union on the West Campus include three cafeterias with multiple choice menus and, in addition, the Oak Room where full meals and *a la carte* items are served. In the Union also are located the U. S. Post Office, the University Store, the University Barber Shop, and miscellaneous offices and assembly rooms.

**ESTIMATED EXPENSES FOR AN ACADEMIC YEAR:** The necessary expenses of a graduate student are moderate: the University dormitories provide thoroughly comfortable and wholesome living conditions at a minimum cost, while all charges made by the University have been kept low. Incidental expenses naturally depend upon the tastes and habits of the individual. The following table gives the necessary college expenses for one year:

	<i>Low</i>	<i>Moderate</i>	<i>Liberal</i>
Tuition .....	\$350.00	\$ 350.00	\$ 350.00
General Fee .....	120.00	120.00	120.00
Room-rent .....	100.00	125.00	175.00
Board .....	350.00	400.00	450.00
Laundry .....	25.00	30.00	35.00
Books .....	22.50	30.00	45.00
Athletic Fee (optional) .....	10.00	10.00	10.00
<i>Total</i> .....	<u>\$977.50</u>	<u>\$1,065.00</u>	<u>\$1,185.00</u>

# Requirements for Admission to the School of Forestry



THE following general requirements of the School of Forestry apply to candidates for the Master of Forestry degree:

Admission to the School of Forestry presupposes that the applicant is either a graduate of a scientific school, college, or university of high standing, but without professional training in forestry; or that he is a graduate of a professional school of forestry. He will present not less than four years of credit of collegiate grade with at least one and one half times as many quality points as hours.<sup>1</sup>

An applicant with no professional training in forestry will present a certified transcript of his academic record showing that he has had conferred upon him a degree in arts, science, or engineering; and that he has satisfactorily completed undergraduate work in minimum amount as follows:

One year of botany, including the morphology, physiology, and identification of plants.

One year each of English composition and of chemistry.

One course each in physics and in the principles of economics.

Mathematics, through college algebra and trigonometry.

It is urged that an applicant without professional training in forestry present additional credits in the above subjects and in one or more of the following subjects: soils, geology, mineralogy, petrology, climatology, surveying, languages (particularly German and French), sociology, political science, philosophy, psychology, and zoology.

An applicant who is a graduate of a professional school of forestry will present a certified transcript of scholastic record showing the award of a degree. Before registering for the first semester of residence, such applicants will be required to select the branch or branches of forestry in which they wish to concentrate the major part of their work and to prepare their proposed programs in conference with the appropriate faculty adviser.

Students must make application for admission in advance of the opening of the school year. Those students entering without acceptable courses in plane surveying, forest surveying, and forest mensura-

<sup>1</sup> Grades for each hour of college credit and also for credit earned in the School of Forestry are valued in quality points as follows: "A," 3 points; "B," 2 points; "C," 1 point; "D," no points; and "F," no credit and —1 point.

tion must take the twelve weeks of work in these subjects in the Summer Session, and are required to submit their applications prior to May 1. Students entering with advanced standing in surveying and forest mensuration should make application before September 1. Application blanks will be sent upon request made to the Dean of the School of Forestry.



# Graduate Record Examination



**A**LL NEW applicants for admission to the School of Forestry will be required to take the Graduate Record Examination before their admission to the School is completed. In cases where it is not possible to take the Examination before arrival at Duke University and where the transcript of academic work clearly shows that a student is otherwise eligible for admission, the Examination may be taken the first time it is given here after the student's arrival. Students may make their arrangements for taking this Examination directly with the Educational Testing Service, P.O. Box 592, 20 Nassau Street, Princeton, New Jersey. Examinations are conducted several times each year at centers distributed throughout the United States and Canada, and wherever possible students should apply to such a center for the Examination. Applicants in the West Coast region should inquire of the Director of the West Coast Office, Educational Testing Service, Box 2416, Terminal Annex, Los Angeles 54, California.

Applicants are advised to take the advanced test in biology, unless specially qualified in one of the other fields in which an advanced test is given. The record of a student's achievement in the Examination will not only be used in connection with admission to graduate study in forestry but will also be considered in planning his program of study and in case of an application for a scholarship or fellowship.

# Requirements for the Degree of Master of Forestry



THE degree of Master of Forestry (M.F.) is conferred upon students who have satisfactorily completed two years of study in technical forestry and one term of twelve weeks work in plane surveying, forest surveying, and forest mensuration in the Summer Session. In addition to the Summer Session work a total of not less than sixty semester hours credit is required for the M.F. degree, of which at least fifty shall have been obtained in the School of Forestry. Each student, to qualify for the M.F. degree, must have obtained at least one and one half quality points per semester hour of credit under the quality-point system (see page 19).

Field studies of typical timber-harvesting, manufacturing, and other utilization operations in the South Atlantic Coastal Plain are conducted from the School's field headquarters during a two-week period in the spring semester as part of the work required of students registered in Harvesting and Processing Forest Products (Forestry 212). Other students may be permitted or advised to take this work for which one semester hour of credit may be earned by registering for it in Forestry 212A. A similar period of field work in forest soils, silviculture, forest management, and other subjects in the coastal plain is available to students.

No student may take less than fourteen or more than eighteen hours in any one semester without special permission of the School of Forestry Faculty. The following work will be required of all candidates for the M.F. degree:

## SUMMER SESSION

	S.H.
Plane Surveying (C.E. S110) .....	4
Forest Surveying (F. S150) .....	5
Forest Mensuration (F. S151) .....	4

## FIRST YEAR

*First Semester**Second Semester*

	S.H.		S.H.
Dendrology (F. 253) .....	3	Harvesting and Processing Forest Products (F. 212) .....	4
Anatomy of Wood (F. 259) .....	3	Forest Pathology (F. 224) .....	3
Forest Soils (F. 261) .....	3	Sampling Methods (F. 251) .....	3
Economics of Forestry (F. 277) .....	3	Silvics (F. 264) .....	3
Electives .....	3	Electives .....	2

## SECOND YEAR

Two curricula in forestry are available after the common minimum requirements for both have been met. One is in general forestry; the other in forest products. The required work in each curriculum, in addition to that common to both, is:

## GENERAL FORESTRY CURRICULUM

*First Semester**Second Semester*

	S.H.		S.H.
Forest Entomology (F. 231) .....	3	Soils and Silviculture Spring Trip (F. 266) .....	1
Silviculture (F. 265) .....	3	Forest Valuation (F. 278) .....	3
Applied Silviculture (F. 267) .....	1	Management Plans (F. 282) .....	2
Forest Protection (F. 273) .....	2	Thesis research and electives .....	9
Forest Management (F. 281) .....	3		
Thesis research and electives .....	3		

## FOREST PRODUCTS CURRICULUM

*First Semester**Second Semester*

	S.H.		S.H.
Seasoning and Preservation (F. 213) .....	3	Forest Products Entomology (F. 232) .....	3
Silviculture (F. 265) .....	3	Properties of Wood (F. 260) .....	3
Forest Management (F. 281) .....	3	Industrial Engineering (Eng. 158) ..	3
Advanced Forest Utilization (F. 311) .....	3	Thesis research and electives .....	6
Thesis research and electives .....	3		

Each candidate is required to file in the office of the Dean of the School of Forestry on or before May 15 three copies of a thesis, type-written and bound in accordance with regulations set forth by the Faculty. The thesis shall be based upon an original study made in the field, laboratory, or library.

Work of equivalent grade done in residence at other institutions may, with the approval of the Faculty, be accepted as credit toward the M.F. degree. A minimum of one year's residence is required at Duke University. Students who have had satisfactory undergraduate training in forestry may, with the approval of the Faculty, elect to devote the major portion of their time to research under the supervision of one or more members of the Faculty and prepare a more comprehensive thesis than is required of students entering the School without previous work in forestry. Students in the School of Forestry may take in allied departments of the University as electives certain courses approved by the Faculty.

# Requirements for the Degree of Doctor of Forestry



**THE DEGREE:** The degree of Doctor of Forestry (D.F.) is a professional and research degree, involving both advanced study and research. It is based upon evidence of high attainments in a special branch of forestry knowledge or in the broad field of forestry, including the production of a thesis which is the result of original work and which is a distinct contribution to knowledge in the field of forestry.

A student who plans to enter upon a program of work leading to the degree of Doctor of Forestry should consult or enter into correspondence with the Dean of the School of Forestry. He will then be advised as to the possibility of obtaining the necessary instruction and supervision of work in the fields desired.

**RESIDENCE:** The normal period of resident graduate study, following satisfaction of the general requirements for admission to the Duke School of Forestry, is a minimum of two academic years after the student has obtained the graduate professional degree of Master of Forestry, or its equivalent. At least one of these two years of graduate study must be spent in actual residence at Duke University. With the approval of the Faculty of the School of Forestry work of equal grade done in residence at another college or university, or at a research station or institute not connected with a college or university, may be accepted toward a Doctor of Forestry degree. Only in connection with the preparation of the thesis will work be accepted that has been done elsewhere than in residence at a college, university, research station, or institute. A student whose undergraduate work is insufficient in amount or unsatisfactory in character may be required to spend additional time in preliminary courses essential as a basis for the graduate work he proposes to undertake.

Students whose research is concerned with the study of trees and forest stands in the Duke Forest during the growing season may find it necessary to be at the University during the summer.

Credit for one year of work done in regular terms of the Summer Session at Duke University may be given with the approval of the School of Forestry Faculty. Graduate work of fragmentary character taken over a long period of years, or work completed many years before the student becomes a candidate for the degree at Duke University, will not be accepted as satisfying the requirements of residence, except in unusual cases.

**APPLICATION FOR CANDIDACY:** No student will be admitted as a candidate for the degree of Doctor of Forestry until he has obtained the professional graduate degree of Master of Forestry or its equivalent, either at Duke University or at a professional school of forestry of recognized standing. A student desiring to become a candidate for the Doctor of Forestry degree is ordinarily required to file with the Dean of the School of Forestry, at the beginning of his graduate work toward this degree, a formal application indicating in which field and under what professor he proposes to carry on research. A committee of the Faculty will then be appointed to supervise the student's work, with the professor in charge of his research as chairman. If and when the committee finds that the preliminary requirements of the major field have been satisfied, the chairman of the committee will report the fact in writing to the Dean of the School of Forestry. In the case of students who come to Duke University for only the last year of graduate work, and in special cases approved by the School of Forestry Faculty, the application for recognition as a candidate for the Doctor of Forestry degree may be filed later than provided above, but not later than October 15 of the academic year in which it is desired that the degree be conferred.

**PROGRAM OF STUDY:** The program of study of a candidate for the Doctor of Forestry degree will be arranged after consultation with the committee provided for in the preceding section and is subject to the approval of the Dean and Faculty of the School of Forestry. The student must select a major field and one or two minor related fields. Both major and minor may be selected in different branches of forestry or the minor may be taken in a related field in some other school or department of Duke University.

**FOREIGN LANGUAGES:** A reading knowledge of two foreign languages is required. One language shall be either French or German, and the other optional to fit the requirements of the student's problem. No student may come up for his preliminary examination before having satisfied the language requirements for the Doctor of Forestry degree. Foreign language examinations are conducted by the appropriate language department or, in special cases, by another qualified member of the Faculty of Duke University.



**PRELIMINARY EXAMINATION:** Toward the end of the first full year of graduate work for the Doctor of Forestry degree (or in special cases early in the second year), a preliminary examination of each candidate will ordinarily be held covering the general field of his studies. This examination will be conducted by the committee in charge of the student's work and will be written. A student who passes the examination will be recognized as a candidate for the Doctor of Forestry degree. A student's major and minor subjects will ordinarily be included in this preliminary examination.

If a student fails on his first examination, he may make a second attempt after six months upon recommendation of his committee and approval by the Dean of the School of Forestry. Two failures on this examination make the student ineligible to continue work toward the Doctor of Forestry degree at Duke University.

**THESIS:** The thesis for the Doctor of Forestry degree must be a contribution to knowledge. The subject of the thesis must be filed with the Dean of the School of Forestry on or before October 15 of the academic year in which the candidate desires to take the final examination for his degree. The subject must receive the written approval of the professor under whom the thesis is being written and of the Dean of the School of Forestry. The thesis must be completed to the satisfaction of the major professor. Four typewritten copies in approved form must be deposited with the Dean of the School of Forestry on or before April 15 if the student desires to be examined on the thesis in the same academic year. The title page must be approved by the Dean of the School of Forestry. Two of the copies, the original and a carbon copy, are placed in the School of Forestry library, one copy goes to the major adviser, and one is returned to the student.

The candidate's thesis must be published either in its original form or in a modified form approved by the Dean of the School of Forestry and the committee in charge of the candidate's work. In its published form the title page should include this statement: "A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Forestry in the School of Forestry of Duke University."

Before the degree is conferred the candidate must deposit with the Treasurer of the University a special thesis fee of fifty dollars in cash. If the thesis is published in a form satisfactory to the Dean of the School of Forestry and to the professor under whom it is written within a period of three years from the date the degree is granted the fee of fifty dollars is returned. Ten copies of the published thesis must be deposited in the office of the Dean of the School of Forestry as provided by regulations of the Faculty of this school.

**FINAL EXAMINATION:** The final examination will be on the thesis and on related subject matter and will be oral. Approximately

one year must elapse between the date of the preliminary examination and the final examination, except in special cases approved by the School of Forestry Faculty. Two failures on this examination make a student ineligible to continue work toward the Doctor of Forestry degree at Duke University. The second examination may be given only upon the recommendation of the professor in charge of the thesis and the approval of the Dean of the School of Forestry.

**GRADING:** Members of the Faculty are expected to report grades of graduate students to the School of Forestry Office not later than February 15 for the first semester and not later than June 15 for the second semester on the cards provided for that purpose. An average grade of "B" or better will be required for all work, beyond that for the degree of Master of Forestry, that is to be credited toward the Doctor of Forestry degree. A mark of "Incomplete" may be given when a student has failed, for an acceptable reason, to complete some portion of the required work in which his standing is generally satisfactory. Unless a report is made within one year that the work has been satisfactorily completed all credit will be lost.

# Forestry in the Graduate School



MAJOR and minor work is offered in the scientific aspects of forestry leading to the A.M. and Ph.D. degrees, which are administered by the Graduate School of Arts and Sciences. Work for these degrees may be pursued only in forest-tree physiology, wood anatomy and properties, forest pathology, silvics, forest soils, forest mensuration, forest entomology, and forest economics. Students who have had specialized training in botany or soil science and in allied basic subjects, such as physics, chemistry, geology, and zoology, may pursue graduate study and research only in the specialized fields for which their previous work has qualified them. Students who do not have previous training in forestry will be required to complete a minimum of thirty semester hours of approved work in forestry as a preliminary requirement to advanced study for the A.M. and Ph.D. degrees. Holders of these degrees will not be regarded as professionally trained foresters.

Applicants for admission to the Graduate School must ordinarily have made, in their undergraduate work, not less than a "B" average and must not have concentrated excessively in one field of study to the detriment of a rounded program. They should have met substantially the requirements for the A.B. or B.S. degree at Duke University.

In addition to fulfilling the usual requirements for admission, the applicant must satisfy the Director of Graduate Studies in Forestry as to his liberal arts training, as well as to his preliminary training in the field of forestry.

For detailed information concerning admission to the Graduate School, and for regulations governing candidacy for the A.M. and Ph.D. degrees, language requirements, residence requirements, and other regulations concerning these degrees, the student should consult the *Bulletin* of the Graduate School of Arts and Sciences.



# Courses and Subjects of Instruction



*With the exception of the Summer Session courses, odd-numbered courses are offered in the autumn semester, and even-numbered courses are offered in the spring semester.*

## IN THE SUMMER SESSION

C.E. S110. PLANE SURVEYING.—A special section of C.E. 61 intended for students in Forestry and others of advanced standing. *Four weeks, eight hours a day, beginning June 13, 1951.* 4 s.h. MR. BROWN

S150. FOREST SURVEYING.—Application of plane surveying to forest problems; practice in making boundary and topographic surveys of forested tracts, using both intensive and extensive methods. Work includes use of transit, level, traverse board, topographic abney and slope tape, and aneroid barometer. Prerequisites: Civil Engineering S110, plane surveying, or equivalent. *Five weeks, eight hours a day, beginning July 11, 1951.* 5 s.h. (w)

ASSISTANT PROFESSOR RUDOLPH

S151. FOREST MENSURATION.—Field studies in methods of measuring content and growth of trees and forest stands; practice in timber estimating, log scaling, use of mensurational instruments, and collection of basic data. *Four weeks, eight hours a day, beginning August 15, 1951.* 4 s.h. (w) PROFESSOR SCHUMACHER

## FOR SENIORS AND GRADUATES

212. HARVESTING AND PROCESSING FOREST PRODUCTS.—Methods of harvesting and processing products obtained from forests, with emphasis on application of methods to managed forests in important forest regions of North America and a consideration of costs. A two-week field trip in the southeast is required for visits to typical harvesting operations and manufacturing plants. 4 s.h. (w)

PROFESSOR WACKERMAN

213. SEASONING AND PRESERVATION OF WOOD.—Principles of seasoning lumber and other forest products by air drying and kiln drying, types of kilns and their operation; principles, methods, and materials used in treating wood to increase its durability. 3 s.h. (w)

PROFESSOR WACKERMAN

214. MARKETING FOREST PRODUCTS.—Methods of selling and distributing timber, lumber, and other forest products in domestic and foreign trade; transportation methods; promotional activities of trade associations; competition between producing regions for markets and problems arising from the development of wood substitutes. Prerequisites: Forestry 212 or equivalent. 3 s.h. (w)

PROFESSOR WACKERMAN

224. FOREST PATHOLOGY.—Special reference to diseases of forest trees. Prerequisites: Botany 1 and 2, and Forestry 253, or equivalents. 3 or 4 s.h. (w)

PROFESSOR WOLF

231. FOREST ENTOMOLOGY.—Morphology, general classification, life histories, and control of insects injurious to forest trees, logs, and lumber. 3 s.h. (w)

ASSOCIATE PROFESSOR ANDERSON

232. FOREST PRODUCTS ENTOMOLOGY.—Special reference to insects infesting forest products; recognition, character of damage, and control of species causing injury to manufactured wood products. 3 s.h. (w)

ASSOCIATE PROFESSOR ANDERSON

236. FOREST GAME MANAGEMENT.—Characteristics and life histories of forest animals; interrelationship between animals and forests; management of forest animals for revenue; control of noxious species. 3 s.h. (w)

ASSOCIATE PROFESSOR ANDERSON

251. SAMPLING METHODS IN FORESTRY.—Statistical background for solution of sampling problems with special reference to sample inventory of a forest property. Offered both semesters. Prerequisite: Forestry SI51. 3 s.h. (w)

PROFESSOR SCHUMACHER

252. FOREST MENSURATION.—Empirical equations and curve fitting appropriate for construction of timber yield tables, tree volume and taper tables; significance tests and graphical solution of equations. Assignments require operation of calculating machines. Prerequisite: Forestry 251. 3 s.h. (w)

PROFESSOR SCHUMACHER

253. DENDROLOGY.—Nomenclature, classification, and identification of woody plants with special reference to species indigenous to southeastern United States and other important forest regions of temperate North America. Laboratory and field work. Prerequisite: one year of botany. 3 s.h. (w)

PROFESSOR HARRAR

255. BONDING OF WOOD.—Preparation of veneers and lumber for bonding; types and characteristics of modern adhesives used in the manufacture of plywood and laminates; cold and hot pressing procedures; use of electronic heating; bag molding techniques; manufacture and properties of transmutated wood; inspection and testing procedures. Prerequisite: Forestry 260 or equivalent. 3 s.h. (w)

PROFESSOR HARRAR

257. DESIGN OF FORESTRY EXPERIMENTS AND ANALYSIS OF DATA.—Role of experimental design in field and laboratory, and statistical analysis of data as aspects of scientific methods in forest research. 5 s.h. (w)

PROFESSOR SCHUMACHER

259. WOOD ANATOMY.—Study of the physical features and the gross and minute structural characteristics of wood leading to the identification of the commercial woods of the United States, and the important tropical woods used in American wood-working industries. Elementary microtechnique. Prerequisite: One year of botany. 3 s.h. (w)

PROFESSOR HARRAR

260. PROPERTIES OF WOOD.—The chemical nature of wood substance and its industrial chemical derivatives. Wood-moisture relationships; pertinent non-mechanical physical properties; mechanical properties and factors affecting the strength of wood; standard timber testing procedures. Uses of woods as determined by their properties. Prerequisites: Forestry 259, one year of college chemistry; one course in college physics. 3 s.h. (w)

PROFESSOR HARRAR

261. FOREST SOILS.—Origin, development, and classification of soils with special emphasis on those developed in humid climates; morphological, physical, and chemical properties of soils in relation to growth of trees; effect of forests on soils. Prerequisites: Chemistry 1 and 2, and Physics 1, or equivalent; physical geology, mineralogy, petrology, and analytical chemistry are also desirable. 3 s.h. (w)

PROFESSOR COILE

264. SILVICS.—Ecological foundations of silviculture with special reference to forest site factors; influence of forests on their environment; growth and development of trees and stands; origin, development, and classification of forest communities; methods of studying forest environments. Desirable prerequisites: plant physiology, plant ecology, and Forestry 253 and 261, or equivalents. 3 s.h. (w)

PROFESSOR KORSTIAN

265. **THEORY AND PRACTICE OF SILVICULTURE.**—Principles governing natural regeneration and treatment of forest stands and their application; reproduction methods, intermediate cuttings, and cultural operations. Field practice includes marking for various kinds of cuttings, cultural treatments, and study of managed stands in the Duke Forest. Prerequisite: Forestry 263 or equivalent. 3 s.h. (w) PROFESSOR KORSTIAN

266. **SOILS AND SILVICULTURE SPRING TRIP.**—Approximately one week at spring camp studying soils and silviculture in the coastal plain. Prerequisite: Forestry 265 or equivalent. 1 s.h. PROFESSOR COILE

267. **APPLIED SILVICULTURE.**—Application and comparison of silvicultural practices to principal commercial forest species, types and regions of temperate North America, with particular emphasis on the South. Field work will include preparation of silvicultural plans. Prerequisite: Forestry 265 or equivalent. 1 s.h. (w) PROFESSOR KORSTIAN

268. **FOREST SEEDING AND PLANTING.**—Place of artificial regeneration in practice of forestry; reforestation surveys and plans; collection, extraction, cleaning, testing, and storage of forest tree seeds; direct seeding; nursery practice; forest planting. 2 s.h. (w) PROFESSOR KORSTIAN

273. **FOREST PROTECTION.**—Principles of forest protection; causes, character and effects of forest fires; principles of forest fire prevention, presuppression and suppression; fire control costs and fire plans; protection against domestic animals, wildlife, and atmospheric agencies. 2 s.h. (w) ASSISTANT PROFESSOR RUDOLPH

275. **FORESTRY POLICY.**—Critical study of forestry movement and development of a forestry policy, particularly in United States; brief résumé of forestry in important foreign countries; public land laws of United States; development of Federal and State forestry; forestry laws. 2 s.h. (w) MR. SULLIVAN

277. **ECONOMICS OF FORESTRY.**—Principles of forest economics. Contributions of land, labor, and capital to income from forestry enterprises, costs of production and maintenance of forest income; forest resources and requirements in products and services; consumption and prices of forest products; forest ownership problems; forest appraisal and comparative valuation; forest fire insurance and forestry credit; forest taxation; timber marketing problems; effect of business cycles and long-term trends upon demand and prices of forest products. Prerequisite: at least one course in the principles of economics. 3 s.h. (w) MR. SULLIVAN

278. **FOREST VALUATION.**—Principles underlying the appraisal of values of forests and forestry. The use of interest and the discount process in timber appraisals for going enterprises and in determinations of the profitability of prospective forestry enterprises. Use of sale comparisons and conversion returns as aids in forest valuation. Prerequisites: Forestry 277 and 280, or equivalents. Not open to students who have previously had a course in forest valuation. 3 s.h. (w) MR. SULLIVAN

279. **ECONOMIC ANALYSIS IN FORESTRY.**—Economic analysis as an aid in the solution of forestry problems. Applications peculiar to forestry in consideration of land and economic rent, labor and wages, capital and interest, risk, and flow of income; use of marginal cost and comparative valuation in testing efficiency of forestry operations and in solving problems of land use and forest ownership; analysis of timber prices and their relation to the business cycle; critical analysis of suggested solutions of the problems of forest taxation, forest insurance, and forestry credit. Open only to graduates of schools of forestry. 3 s.h. (w) MR. SULLIVAN

281. **FOREST MANAGEMENT.**—Principles of organizing forest properties for systematic management; use of data obtained in surveys and inventories; principles of forest regulation, including a study of normal and actual forests, rotations, cutting cycles, and methods of regulating the cut in even-aged and all-aged forests for sustained yield; introduction to the preparation of preliminary forest management plans. Prerequisite: Forestry S150, S151 or equivalent. 3 s.h. (w) ASSISTANT PROFESSOR RUDOLPH

282. **MANAGEMENT PLANS.**—The preparation of a preliminary forest management plan. Relocation of property boundaries; forest surveys and inventories; subdivision of forest properties for management purposes; determination of the increment and regulation of the cut; selection of applicable methods of silvicultural treatment; provisions for the protection, operation and general administration of forest properties; forest records. One week is spent in field work in the South Atlantic Coastal Plain. Prerequisites: Forestry 265 and 280 or equivalents. 2 s.h. (w)  
ASSISTANT PROFESSOR RUDOLPH

212A TO 282A. **SPECIAL STUDIES IN FORESTRY.**—Work on the same level as the foregoing Senior-Graduate courses to meet the needs of individual students. Credits and hours to be arranged.  
THE STAFF

#### FOR GRADUATES

301-302. **ADVANCED STUDIES IN FORESTRY.**—Credits to be arranged. To meet individual needs of graduate students in the following branches of forestry:

A. **SILVICS.**—Prerequisites: Forestry 253, 261, and 263, or equivalents.

PROFESSOR KORSTIAN

B. **FOREST SOILS.**—Prerequisite: Forestry 261 or equivalent.

PROFESSOR COILE

C. **SILVICULTURE.**—Prerequisites: Forestry 265 and 266 or equivalent.

PROFESSOR KORSTIAN

D. **FOREST MANAGEMENT.**—Prerequisite: Forestry 280 or equivalent.

ASSISTANT PROFESSOR RUDOLPH

E. **FOREST ECONOMICS.**—Prerequisite: Forestry 277 or 279 or equivalent.

MR. SULLIVAN

F. **PROPERTIES OF WOOD.**—Prerequisites: Forestry 259 and 260, or equivalent.  
PROFESSOR HARRAR

G. **FOREST MENSURATION.**—Prerequisite: Forestry 252, or equivalent.

PROFESSOR SCHUMACHER

H. **FOREST ENTOMOLOGY.**—Prerequisites: Forestry 231, 232 or equivalent.

PROFESSOR BEAL

I. **FOREST UTILIZATION.**—Prerequisite: Forestry 212 or equivalent.

PROFESSOR WACKERMAN

J. **DENDROLOGY.**—Prerequisite: Forestry 253 or equivalent.

PROFESSOR HARRAR

311. **ADVANCED FOREST UTILIZATION.**—Analysis of the principles of determining the cost of and return from harvesting and manufacturing timber for various products and other uses of forests; study of factors governing the relation of tree size to net stumpage values; and the application of these principles and methods in the solution of actual case problems. Prerequisite: Forestry 212 or equivalent. 3 s.h. (w)  
PROFESSOR WACKERMAN

320. **SEMINAR IN SILVICULTURE.**—Arranged primarily to give graduates of other schools of forestry special training in the silviculture of the forests of the South. Approximately one week will be spent at the spring camp studying silviculture in the coastal plain. Prerequisite: At least one course in silviculture. 3 s.h. (w)  
PROFESSOR KORSTIAN

322. **SOIL CLASSIFICATION AND MAPPING.**—Classification of soils as natural bodies. Mapping of soils, land use classes and forest site classes. Ordinarily one week of field study will be made of soils in either the coastal plain or mountains. Prerequisite: Forestry 261. 2 s.h. (w)  
PROFESSOR COILE

323-324. **ADVANCED FOREST PATHOLOGY.**—Advanced study and research on life histories and control of diseases of forest trees to meet individual needs of graduate students. Prerequisites: plant physiology and forest pathology. Credits to be arranged.  
PROFESSOR WOLF

351-352. **ADVANCED PHYSIOLOGY OF FOREST TREES.**—Advanced study and research on problems in physiology of forest trees to meet individual needs of graduate students. Prerequisites: plant physiology and plant ecology or silvics. Credits to be arranged.

PROFESSOR KRAMER

354. **FOREST SOIL FERTILITY.**—Experimental approach to the problems of fertility in forest soil. Influence of stand composition on nitrogen transformation. Methods of studying the exchange complex and the significance of base exchange in forest soil fertility. Prerequisites: Forestry 251 and 261, plant physiology, bacteriology and analytical chemistry. 3 s.h. (w)

PROFESSOR COILE

356. **COMPARATIVE FOREST VALUATION.**—Critical analysis of classical and contemporary doctrines of comparative forest valuation. Principles underlying the measurement of forces affecting values of land for forestry and alternative uses and investments of capital. Solution of problems involving procedures based upon these principles. Prerequisites: Forestry 277, 278, or 279, or equivalent; courses in economic theory are desirable. 2 s.h. (w)

MR. SULLIVAN

357-358. **RESEARCH IN FORESTRY.**—Credits to be arranged. Students who have had adequate training may do research under direction of members of the Faculty in the branches of forestry indicated under courses 301-302 with the same prerequisites as thereunder noted. Each branch to bear the same letter designation as under Courses 301-302.

THE STAFF



# Enrollment 1950-1951



- \*Allan, Kenneth Mathews (B.S.F., University of Michigan), Cleveland, Ohio.
- \*Allen, James Clarence, Jr. (B.S.F., University of Georgia), Etowah, Tenn.
- \*Applefield, Milton (B.S., New York State College of Forestry), Miami, Fla.
- \*Barnes, Robert Lloyd (B.S., Duke University), Roysersford, Pa.
- \*Bell, John Frederick (B.S., Oregon State College), Ashland, Ore.
- \*Bennett, Frank Autrelle (B.S.F., University of Georgia), Cordele, Ga.
- \*Breadon, Robert Edwin (B.S.F., University of British Columbia), Vancouver, B. C.
- \*Bree, Jacobus Christiaan (B.S., State College of Tropical Agriculture at Deventer, Holland), The Hague, Holland.
- \*Brooks, David Emersou (B.S., University of Massachusetts), Waltham, Mass.
- \*Brown, Frederick Allan, Jr. (B.S., University of Connecticut), Waterbury, Conn.
- \*Byers, Donald V. (B.S.F., Montana State University), Missoula, Mont.
- \*Buckner, Edward Reap (B.S., University of North Carolina), Chapel Hill, N. C.
- \*Cantelou, Lamar Black (B.S., University of the South), Montgomery, Ala.
- \*Carlson, Alan Ervin (B.S., University of Massachusetts), Lynn, Mass.
- \*Carvell, Kenneth Llewellyn (A.B., Harvard University; M.F., Yale University), North Andover, Mass.
- \*Curle, Lawrence Duke (B.S.F., North Carolina State College), Raleigh, N. C.
- \*Davis, Steuart Arthur Hamilton (B.S.F., University of New Brunswick), Fredericton, N. B.
- \*\*\*Deetlefs, Philippus Petrus du Toit (B.S., University of Stellenbosch; M.F., Duke University), Clanwilliam, So. Africa.
- \*Diamond, Sidney (B.S., New York State College of Forestry), New York, N. Y.
- \*Dixon, Arthur Curtis (B.S.F., University of New Brunswick), Fredericton, N. B.
- \*Duperret, Donald Lucien (B.S., Holy Cross College), Teaneck, N. J.
- \*FERENCE, George Melville (B.S., Pennsylvania State University), Pittsburgh, Pa.
- \*Ferguson, Edwin Roudillou (B.S.F., Louisiana State University), Saucier, Miss.
- \*Follett, George Leonard (B.S.F., Purdue University), Adams, Mass.
- \*Foreman, Edwin Earl (B.S., Duke University), Durham, N. C.
- \*Forsyth, Harold Frederic, Jr. (B.S.F., Montana State University), Rumford, R. I.
- \*Furnival, George Mason (B.S.F., University of Georgia), Rixeyville, Va.
- \*Ganley, Robert Verrill (B.S., University of Massachusetts), North Andover, Mass.
- \*Gashwiler, Robert Novinger (B.S.F., Montana State University), Novinger, Mo.
- \*Geiger, Walter Bernard (B.S., University of Connecticut), North Windham, Conn.
- \*Gilmer, William Dryden (B.S., Duke University), Kingsport, Tenn.
- \*Glabau, William Edward (B.S., University of Massachusetts), New Britain, Conn.
- \*Godfrey, Bernard Ephraim (B.S., University of Connecticut), New Haven, Conn.
- \*Haislet, John Aulden (B.S.F., University of Georgia), Athens, Ga.
- \*Hawes, Raymond Burke (B.S., Duke University), Northport, N. Y.
- \*Hewlett, George Tyler (B.S., Lehigh University), Bridgeport, Conn.
- †Huffman, Jacob Braiuard (B.S., Virginia Polytechnic Institute; M.F., Duke University), Brunswick, Ga.
- \*Ince, Gordon Anthony (B.S., Colorado A. & M. College), Racine, Wis.
- \*Koch, Daniel Francis (B.S., Rutgers University), Elizabeth, N. J.
- \*Lamond, Leo Daniel (B.S., University of Maine), Perry, Me.
- \*Larrabee, Donald Ralph (B.S., University of Maine), South Windham, Me.
- \*Lee, Robert Emil, III (B.S., Duke University), Durham, N. C.
- \*McClurkin, Douglas Charles (B.S.F., University of Georgia), Jacksonville, Fla.
- \*\*Malac, Barry (University of Prague), Durham, N. C.
- \*Maple, William Robert (B.S., Rutgers University), Lawrenceville, N. J.
- \*Massey, William Everard, Jr. (A.B., Duke University), Charlotte, N. C.
- Mathewson, Clarke (A.B., University of North Carolina; M.F., North Carolina State College), Raleigh, N. C.
- \*May, Robert Legard (B.S., Virginia Polytechnic Institute), Glade Spring, Va.
- \*Michell, Arthur Stephen (B.S.F., University of Toronto), Toronto, Ont.
- †Oliver, William Frazier, Jr. (B.S.F., University of Florida; M.S.F., University of Florida), Fort Myers, Fla.
- \*Parker, James Austin (B.A., Mount Allison University; University of New Brunswick), Liverpool, Nova Scotia.
- \*Phelps, William Robert (B.S., North Carolina State College), Monkton, Md.
- \*Phythyon, Hugh Reed (B.S., Allegheny College), Sharpville, Pa.
- \*Powell, Louis William (B.S., Oregon State College), Medford, Ore.
- \*Pomeroy, Donald Alfred (B.S.F., University of Michigan), New London, Wis.
- Randall, Warren Robert (B.S., University of Idaho; M.S., University of Idaho), Corvallis, Ore.
- \*Ray, Philip Lancaster (B.S., University of Minnesota), Greenville, S. C.
- \*Rhett, Robert Barnwell (B.S., U. S. Naval Academy), Charleston, S. C.
- \*Riley, Walter Samuel (B.S., New York State College of Forestry), Weehawken, N. J.



- \*Santoro, Jean Claudio (B.S., University of Massachusetts), Franklin, Mass.  
 \*Schwartz, Charles Murry (B.S., University of Connecticut), Norwich, Conn.  
 †Smith, David V. (B.S.F., University of Georgia; M.F., Duke University), Lumpkin, Ga.  
 \*Smith, Waring Wright, Jr. (B.S., Virginia Polytechnic Institute), Franklin, Va.  
 \*Swensen, James Herbert (B.S., University of Massachusetts), Arlington, Mass.  
 \*Thornton, Ernst Seemann (B.S.F., Louisiana State University), Huttig, Ark.  
 \*Turner, Ralph Gray (B.S., University of Richmond), Richmond, Va.  
 \*Vande Linde, Frank (B.S.F., West Virginia University), Danville, W. Va.  
 \*Wagoner, Howard Eugene (B.S.F., University of Maine), Guilford, Me.  
 \*\*\*Warner, John Robinson (B.S., Duke University; M.F., Duke University), Walkersville, Md.  
 \*Whitman, Joseph Atwood, Jr. (B.S.F., North Carolina State College), Glendon, N. C.  
 \*Whitney, Richard Boardman (B.S., University of Maine), Thomaston, Me.  
 \*Williams, Webster Douglas (A.B., Duke University), Moncks Corner, S. C.  
 \*Wray, Clayton Junior (B.S., State College of Washington), Clearlake Oaks, Cal.  
 \*Zahner, Robert (B.S., Duke University), Highlands, N. C.  
 †Zak, Bratislav (B.S., Pennsylvania State College; M.F., Duke University), Pittsburgh, Pa.

Total ..... 73

\* Registered for Master of Forestry Degree, 1951.

<sup>1</sup> Withdrew, November 10, 1950.

\*\* Registered for Master of Forestry Degree, 1952.

<sup>2</sup> Withdrew, November 23, 1950.

<sup>3</sup> Withdrew, September 27, 1950, to enter military service.

\*\*\* Registered for Doctor of Forestry Degree, 1951.

† Registered for Doctor of Forestry Degree, 1952.

<sup>4</sup> Withdrew, November 4, 1950.

## *Students of Forestry in the Graduate School of Arts and Sciences*

Bryant, Ralph Clement (B.S., Yale University; M.F., Yale University), New Haven, Conn.  
 Cox, Gene Spracher (B.S., Duke University; M.F., Duke University), Kingsport, Tenn.  
 Wenger, Karl Frederick (B.S., University of Maine; M.F., Duke University), Buckingham, Va.

Total ..... 3

## *Academic-Forestry Seniors in the School of Forestry*

Sliker, Alan William. Sabina, Ohio  
 Sullivan, Edward James. Riverside, N. J.  
 Walrond, Alan Lambert. Durham, N. C.  
 Welsh, John F. Arlington, Va.

Total ..... 4

## *Institutions Represented*

Allegheny College .....	1	University of Connecticut .....	4
Colorado A. & M. College .....	1	University of Florida .....	1
Duke University .....	13	University of Georgia .....	6
Harvard University .....	1	University of Idaho .....	1
Holy Cross College .....	1	University of Maine .....	6
Lehigh University .....	1	University of Massachusetts .....	6
Louisiana State University .....	2	University of Minnesota .....	1
Montana State University .....	3	University of Michigan .....	2
Mount Allison University .....	1	University of New Brunswick .....	3
New York State College of Forestry .....	3	University of North Carolina .....	4
North Carolina State College .....	4	University of Prague .....	1
Oregon State College .....	2	University of Richmond .....	1
Pennsylvania State College .....	2	University of Stellenbosch .....	1
Purdue University .....	1	University of Toronto .....	1
Rutgers University .....	2	United States Naval Academy .....	1
State College of Tropical Agriculture at Deventer, Holland .....	1	Virginia Polytechnic Institute .....	3
State College of Washington .....	1	West Virginia University .....	1
The Citadel .....	1	Yale University .....	2
University of British Columbia .....	1		
		Total Institutions .....	37

## *Geographical Distribution*

### UNITED STATES

Alabama .....	1	New York .....	2
Arkansas .....	1	North Carolina .....	8
California .....	1	Ohio .....	1
Connecticut .....	7	Oregon .....	3
Florida .....	3	Pennsylvania .....	3
Georgia .....	4	Rhode Island .....	1
Maine .....	4	South Carolina .....	2
Maryland .....	3	Tennessee .....	3
Massachusetts .....	7	Virginia .....	5
Mississippi .....	1	West Virginia .....	1
Missouri .....	1	Wisconsin .....	2
Montana .....	1		
New Jersey .....	4	<i>Total States</i> .....	24

### FOREIGN COUNTRIES

Canada .....	5	South Africa .....	1
Holland .....	1	<i>Total</i> .....	3

## *General Summary*

Students in the School of Forestry .....	73
Students of Forestry in the Graduate School of Arts and Sciences .....	3
Academic-Forestry Seniors in the School of Forestry .....	4
<i>Total Enrollment</i> .....	80
Total number of institutions represented .....	37
Total number of states represented .....	24
Total number of foreign countries represented .....	3





# BULLETIN OF DUKE UNIVERSITY



## The College of Engineering

ANNOUNCEMENTS FOR 1951-1952

VOLUME 23

February, 1951

NUMBER 4-B

# Annual Bulletins

FOR GENERAL BULLETIN of Duke University, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF UNDERGRADUATE INSTRUCTION, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE COLLEGE OF ENGINEERING, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES, apply to *The Dean of the Graduate School*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF LAW, apply to *The Dean of the School of Law*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF MEDICINE, apply to *The Dean of the School of Medicine*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF NURSING, apply to *The Dean of the School of Nursing*, Duke University, Durham, N. C.

FOR BULLETIN OF THE DIVINITY SCHOOL, apply to *The Dean of the Divinity School*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF FORESTRY, apply to *The Dean of the School of Forestry*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SUMMER SESSION, apply to *The Director of the Summer Session*, Duke University, Durham, N. C.

Published by Duke University monthly except in July, August, September, and December. Entered as second-class matter March 25, 1929, at the Post Office of Durham, North Carolina, under the Act of August 24, 1912.



BULLETIN  
OF  
DUKE UNIVERSITY



COLLEGE OF ENGINEERING

1950-1951  
ANNOUNCEMENTS FOR 1951-1952

DURHAM, NORTH CAROLINA  
1951



ENGINEERING BUILDING

# Contents



	PAGE
Calendar of the Colleges.....	4
The College of Engineering.....	5
Officers of Administration.....	7
Instructional Staff.....	8
Admission .....	10
Financial Information and Living Accommodations.....	13
Registration and Academic Regulations.....	16
Activities .....	20
Bureau of Testing and Guidance.....	22
Appointments Office.....	23
Reserve Officers Training Corps.....	24
Degree of Bachelor of Science in Engineering.....	27
Department of Civil Engineering.....	31
Staff and Facilities.....	31
Curriculum .....	34
Courses of Instruction.....	35
Department of Electrical Engineering.....	39
Staff and Facilities.....	39
Curriculum .....	42
Courses of Instruction.....	43
Department of Mechanical Engineering.....	47
Staff and Facilities.....	47
Curriculum .....	49
Courses of Instruction.....	51

# Calendar of the Colleges



## 1951

- September 13. Thursday, 9:00 A.M. Dormitories open to freshmen.  
September 13. Thursday, 7:30 P.M. Assembly for all entering freshmen; Freshman Orientation Program begins.  
September 17. Monday. Registration and matriculation of new students with advanced standing, Trinity College and the College of Engineering.  
September 18. Tuesday. Registration and matriculation of new students with advanced standing, Woman's College.  
September 20. Thursday. Instruction begins, fall semester.  
October 30. Tuesday. Junior Examination in English Usage.  
November 10. Saturday. Last day for reporting mid-semester grades.  
November 22. Thursday. Thanksgiving Day; a holiday.  
December 11. Tuesday. Founders' Day.  
December 20. Thursday, 5:00 P.M. Christmas recess begins.

## 1952

- January 3. Thursday, 8:00 A.M. Instruction is resumed.  
January 16. Wednesday. Mid-year examinations begin.  
January 26. Saturday. Mid-year examinations end.  
January 28. Monday. Registration and matriculation of new students.  
January 29. Tuesday. Last day for matriculation for the spring semester.  
January 30. Wednesday. Instruction begins, spring semester.  
March 13. Thursday. Last day for reporting mid-semester grades.  
March 22. Saturday, 12:30 P.M. Spring recess begins.  
March 31. Monday, 8:00 A.M. Instruction is resumed.  
May 19. Monday. Final examinations begin.  
May 29. Thursday. Final examinations end.  
May 31. Saturday. Commencement begins.  
June 1. Sunday. Commencement Sermon.  
June 2. Monday. Graduating Exercises.

# The College of Engineering



THE College of Engineering offers the student full four-year courses in Civil, Electrical, and Mechanical Engineering. Because the class enrollment is carefully limited, each student has an exceptional opportunity to receive his technical training from men who are interested in his individual problems. These men have been recognized for their professional competence and have been selected particularly for their ability to teach.

The curricula of the three departments lead to the degrees of Bachelor of Science in Civil, Electrical, and Mechanical Engineering respectively. All three curricula are fully accredited by the Engineers' Council for Professional Development, which is the ultimate authority of the engineering profession on educational standards; by the Regents of the State of New York; and by other national regional accrediting groups. Each curriculum requires 148 semester hours of work, four of which are in physical education. In addition to the technical subjects necessary to a student in his chosen career, the programs include courses in related work, studies in certain non-engineering fields considered beneficial to him as a citizen and general businessman, and the privilege of electing for himself courses in which he is personally interested.

Instruction in engineering subjects began at Duke University in 1887. Separate departments in civil and electrical engineering were established in 1927; instruction in mechanical engineering began in 1930. This arrangement led in 1937 to the establishment of the Division of Engineering, which included the separate Departments of Civil, Electrical, and Mechanical Engineering. In 1939 the Division composed of these three departments was incorporated into the University structure as the College of Engineering, one of the three coordinate undergraduate colleges of Duke University.

The chief administrative officer of the College is the Dean, who correlates the activities of the three component departments. Three departmental chairmen supervise the work of their respective departments. Together with the Dean, these Chairmen constitute the Executive Committee of the College.

The Council of the College of Engineering is authorized to exercise all educational functions that lie within its field. The Council consists of the Dean of the College of Engineering, the Dean of Undergraduate Studies, the Chairman and one representative from each



engineering department, and other members appointed annually by the President from the general faculty and representing departments in which engineering students are required to take work.

The College is in a new building located on the West Campus and first occupied in January 1948. This E-shaped building houses the entire College of Engineering. It has a total volume of 1,200,000 cubic feet and provides a floor area of 70,000 square feet. Each of the three wings houses the laboratories and the specialized classrooms of one of the three engineering departments. The main portion of the building has offices, classrooms, and other general facilities.

Provided in the building for the use of all three departments of engineering are a number of general facilities.

**LIBRARY:** The Engineering Library contains a growing collection of approximately 14,000 volumes on engineering and closely related subjects, and in addition subscribes to approximately 220 periodicals, of which 130 are bound each year. The well-lighted reading room has seating accommodations for 48 students. Engineering students also have full access to the University Library, to the Woman's College Library, and to the various specialized departmental libraries.

**LECTURE ROOM:** An attractively decorated lecture room seating 216 people permits audio-visual instruction of large groups.

**CLASSROOMS:** There are nine well-lighted classrooms seating an average of 30 students per room.

**DRAFTING ROOMS:** Five drafting rooms that accommodate an average of 30 students each facilitate work in the various courses in which graphic methods are taught and employed.

**MIMEOGRAPHING AND BLUE-PRINTING:** A special room is furnished with equipment for reproducing printed matter and diagrams by either mimeographing, blue-printing, or white-printing.

**PHOTOGRAPHIC DARK ROOM:** In a separate room are facilities for processing a wide variety of photographic material used to supplement course instruction.

**STUDENT LOUNGE:** A convenient lounge is provided for the use of students.

**ENGINEERING PUBLICATIONS ROOM:** The staff of the *DukEngineer*, official student-published magazine of the College of Engineering, has its headquarters in the building.

**CONFERENCE ROOM:** A special room is furnished for conference work by faculty committees and for student interviews with visiting industrial personnel representatives.



# Officers of Administration



ARTHUR HOLLIS EDENS, B.Ph., A.M., M.P.A., Ph.D., LL.D. <i>President of the University</i>	West Campus
PAUL MAGNUS GROSS, B.S., A.M., Ph.D. <i>Vice-President in the Educational Division</i>	Hope Valley
CHARLES EDWARD JORDAN, A.B., LL.D. <i>Vice-President in the Division of Public Relations and Secretary of the University</i>	813 Vickers Avenue
HERBERT JAMES HERRING, A.B., A.M., LL.D. <i>Vice-President in the Division of Student Life</i>	Myrtle Drive
WILLIAM HOLLAND HALL, A.B., A.M., B.C.E., M.S.C.E. <i>Dean, College of Engineering</i>	922 Urban Avenue
ALAN KREBS MANCHESTER, A.B., A.M., Ph.D. <i>Dean of Undergraduate Studies</i>	Myrtle Drive
WILLIAM COUNCILL ARCHIE, A.B., A.M., Ph.D. <i>Assistant Dean, in Charge of Freshmen</i>	2113 Sprunt Street
EVERETT BROADUS WEATHERSPOON, A.B. <i>Director of Admissions</i>	125 Pinecrest Road

## COUNCIL OF THE COLLEGE OF ENGINEERING

Dean: W. H. HALL.  
Dean of Undergraduate Studies: A. K. MANCHESTER.  
Civil Engineering: H. C. BIRD, J. W. WILLIAMS.  
Electrical Engineering: W. J. SEELEY, OTTO MEIER, JR.  
Mechanical Engineering: R. S. WILBUR, F. J. REED.  
Economics: R. S. SMITH.  
English: G. C. HARWELL.  
Mathematics: J. J. GERGEN.  
Secretary: E. B. WEATHERSPOON.

## COMMITTEE OF THE BOARD OF TRUSTEES ON ENGINEERING AND RESEARCH

G. M. IVEY, E. L. JONES, E. W. WEBB, B. E. JORDAN, H. C. DOSS,  
A. H. SANDS, JR., N. A. COCKE.

# Instructional Staff



WILLIAM HOLLAND HALL, A.B., A.M., B.C.E., M.S.C.E. <i>Professor of Engineering</i> <i>Dean, College of Engineering</i>	922 Urban Avenue
HAROLD CRUSIUS BIRD, Ph.B., C.E. <i>Professor of Civil Engineering</i> <i>Chairman, Department of Civil Engineering</i>	1209 Virginia Avenue
WALTER JAMES SEELEY, E.E., M.S. <i>Professor of Electrical Engineering</i> <i>Chairman, Department of Electrical Engineering</i>	1005 Urban Avenue
RALPH SYDNEY WILBUR, B.S. in M.E., M.E. <i>Professor of Mechanical Engineering</i> <i>Chairman, Department of Mechanical Engineering</i>	1018 Demerius Street
CHANDLER WILCOX BROWN, B.S. in C.E. <i>Instructor in Civil Engineering</i>	1423 Woodland Drive
FRANK NICHOLAS EGERTON, A.B., A.M., E.E. <i>Assistant Professor of Electrical Engineering</i>	411 N. Gregson Street
ERNEST ELSEVIER, B.S. in M.E., M.S. in M.E. <i>Instructor in Mechanical Engineering</i>	310 S. Gregson Street
C. DARBY FULTON, JR., B.E. in M.E., Sc.D. <i>Assistant Professor of Mechanical Engineering</i>	1614 University Drive
HOWARD N. HAINES, B.S. <i>Assistant Professor of General Engineering</i>	2307 Club Boulevard
*WILLIAM MARION HARDY, B.S. in M.E. <i>Instructor in Mechanical Engineering</i>	Chapel Hill, N. C.
*MARVIN THOMAS HAILEY, JR., B.S. in E.E. <i>Instructor in Electrical Engineering</i>	Duke University
DARRELL MONROE HEDGECOCK, B.S., B.S. in E.E. <i>Instructor in Electrical Engineering</i>	315 W. Trinity Avenue
RAY WALTER HOLLAND, B.S. in M.E. <i>Instructor in Mechanical Engineering</i>	2528 Glendale Avenue
MCRAE JARRETT, B.S. in E.E. <i>Instructor in Electrical Engineering</i>	914 Markham Avenue
JAMES L. JENKINS, B.E.E., M.S.E. <i>Instructor in Electrical Engineering</i>	1212 B Street
VAN LESLIE KENYON, B.S. in M.E. <i>Assistant Professor of Mechanical Engineering</i>	Hillsboro, N. C.
EDWARD K. KRAYBILL, B.S. in E.E., M.S.E. <i>Assistant Professor of Electrical Engineering</i>	900 Dacian Avenue
RALPH E. LEWIS, B.S. in M.E., M.S. in M.E. <i>Assistant Professor of General Engineering</i>	1401 Alabama Avenue
*VANCE BACON MARTIN, B.S. in E.E. <i>Visiting Instructor in Electrical Engineering</i>	Hillsboro, N. C.

\* Resigned, September 1, 1950.

OTTO MEIER, JR., B.S. in E.E., M.S., E.E. <i>Associate Professor of Electrical Engineering</i>	916 Monmouth Avenue
*RALPH PIERPONT MORGAN, JR., B.S. in M.E. <i>Instructor in Mechanical Engineering</i>	910 Sixth Street
AUBREY E. PALMER, B.S. in Engr., C.E. <i>Assistant Professor of Civil Engineering</i>	2519 State Street
DAVID RABIN, B.S. in M.E. <i>Visiting Instructor in Mechanical Engineering</i> (Part-time)	2014 Bivins Street
FREDERICK JEROME REED, M.E., M.S. <i>Associate Professor of Mechanical Engineering</i>	2203 Englewood Avenue
*GRIMES GIBBONS SLAUGHTER, B.S. in E.E. <i>Instructor in Electrical Engineering</i>	Duke University
WILLIAM BREWSTER SNOW, B.S. in C.E., M.S., Sc.D. <i>Associate Professor of Civil Engineering</i>	1022 West Trinity Avenue
†CHARLES ROWE VAIL, B.S. in E.E., M.S. (E.E.) <i>Assistant Professor of Electrical Engineering</i>	900 Dacian Avenue
LESLIE CLIFFORD WILBUR, B.S., M.S. <i>Instructor in Mechanical Engineering</i>	1208 E. Geer Street
JESSE HOLLAND WILDER, B.S. in M.E., M.S. <i>Instructor in General Engineering</i>	2219 Club Boulevard
JAMES WESLEY WILLIAMS, A.B., B.S. in C.E., M.S. <i>Assistant Professor of Civil Engineering</i>	206 Swift Avenue
MRS. ETHEL LONG KALE <i>Librarian</i>	3325 Chapel Hill Road
JOSEPH PHILIP EDWARDS <i>Laboratory Technician in Electrical Engineering</i>	1604 B Street

Instruction in Non-Engineering subjects is given by members of the General Faculty listed in the Bulletin of Undergraduate Instruction.

\* Resigned, September 1, 1950.

† Leave of absence, academic year, 1950-51.

# Admission



**A**PPPLICANTS may qualify for admission as members of the freshman class or as students with advanced standing. Since the enrollment is limited, the Committee on Admissions selects students who, in its judgment, are best qualified to benefit from the educational advantages which the College offers. The Committee bases its decision on the academic record of the applicant, on test scores when available, and on satisfactory evidence of good character and general fitness for college life at Duke. A personal interview with an officer of the University or a designated alumnus or alumna is of material benefit to the Committee and the applicant.

**ADMISSION TO THE FRESHMAN CLASS:** An applicant for admission to the freshman class must present at least fifteen acceptable units of secondary-school credit. A unit of credit is allowed for a course of study pursued throughout an academic year in an accredited secondary school, provided five recitations a week have been held and the prescribed amount of work has been completed satisfactorily.

*For admission to the College of Engineering* seven of the fifteen units must be in English (3 units), physical science (1 unit), algebra ( $1\frac{1}{2}$  units), plane geometry (1 unit), and solid geometry\* ( $\frac{1}{2}$  unit). The remaining eight units are elective. At least five of them must be in English, foreign language, history and social studies, mathematics, and natural or physical science. It is recommended that these five be chosen from the following list:

English (in addition to the required 3 units) .....	1 unit
Algebra (in addition to the required $1\frac{1}{2}$ units) .....	$\frac{1}{2}$ unit
Trigonometry .....	$\frac{1}{2}$ unit
Physics or chemistry or biology (in addition to the required unit) .....	1 to 3 units
Foreign languages .....	1 to 4 units
†History and social studies .....	1 to 3 units

The three additional units needed to make the total of fifteen may be chosen from the subjects listed above or they may be selected at large from the following table, which gives the subjects acceptable for entrance credit and the maximum credit acceptable in each subject:

\* Any deficiency in this requirement must be made up before the beginning of the sophomore year.

† Applicants who do not present at least one acceptable unit of history must take history in college.

English .....	4	Zoology .....	1
Latin .....	4	General Biology .....	1
Greek .....	3	Physical Geography .....	1
German .....	3	General Science .....	1
French .....	3	Agriculture .....	2
Spanish .....	3	Mechanical Drawing .....	2
Mathematics .....	4	Shop Work .....	2
History and Civics .....	4	Art .....	1
Physics .....	1	Music .....	1
Chemistry .....	1	Commercial Subjects .....	3
Botany .....	1		

**ADMISSION TO ADVANCED STANDING:** An applicant for advanced standing must have fulfilled the equivalent of the requirements for admission to the freshman class, must present official certificates of all work completed in other institutions, and must have an honorable dismissal from each institution previously attended. Credit for work completed will be determined in relation to the curriculum requirements of the College of Engineering.

Applicants for advanced standing should present, as far as possible, subjects corresponding to those required by the College. They may not, during their first semester, register for more than the minimum number of hours required of the class which they enter, except by permission of the Dean.

Transfer credits are tentatively evaluated pending the completion of two semesters of work in residence. To validate provisional credits, the student must earn at least an average of C in a normal load of work. Transfer grades of C or above are rated at one quality point per credit hour when validated. Credits with grades of D are not acceptable.

The maximum amount of credit acceptable from a junior college is sixty semester hours, exclusive of physical education. No credit is given for work completed by correspondence, and credit for no more than six semester hours is allowed for extension courses. Any extension work accepted must be specifically approved by the Dean.

**ADMISSION OF SPECIAL STUDENTS:** Upon the approval of the Dean, students of mature age may be admitted for special work in such courses of instruction as they are qualified to take. They may not be admitted as candidates for a degree in a regular course unless they meet all normal requirements for admission.

**ADMISSION PROCEDURE:** Application for admission to the College of Engineering should be made to the Director of Admissions of Trinity College and the College of Engineering. Application forms and instructions will be sent to the applicant. It is the responsibility of the applicant to see that these forms are properly executed and, together with other requested material, sent promptly to the Director.

Application prior to the final year of the secondary-school course is not required. Formal steps looking toward admission should be initiated, however, early in the senior year.

A graduate of an accredited school who submits fifteen acceptable units of secondary-school subjects, who is recommended by his principal, and who otherwise meets the requirements of the Committee on Admissions may be admitted without examination. The certification and recommendation must be on blanks furnished by the University and signed by the principal of the school in which the applicant completed his course. An applicant who presents fifteen acceptable units for admission from a non-accredited school is required to validate these units by entrance examinations and such other tests as the College may prescribe.

**READMISSION OF FORMER STUDENTS:** A student who, following withdrawal from College, desires to return should apply to the Director of Admissions of Trinity College and the College of Engineering. When applying for readmission the student should make a detailed statement of his activities since leaving Duke University.

**WOMEN STUDENTS:** Women enrolled in the College of Engineering live on the woman's campus and are subject to the general regulations of the Woman's College.



# Financial Information and Living Accommodations



**F**EES paid by the students cover only a part of the cost of their instruction and of the operations of the University. Income from endowment and contributions from the alumni, alumnae, and other public-spirited men and women meet the balance, which constitutes more than half the total cost.

**FEES:** A registration fee of \$20.00 is required of all new students. This fee is payable only once. A tuition fee of \$175.00 and a general fee of \$75.00 are payable at the beginning of each semester. The general fee is in lieu of special fees usually charged for matriculation, use of laboratories, student health service, commencement, etc.

An advance deposit of \$25.00 is required of all students in residence at the time of spring registration in order to reserve a place in the classes for the fall semester. This is applied toward payment of the general fee at the opening of the fall semester. The deposit will be refunded to students whom the University does not permit to return. Students who of their own volition fail to return are not entitled to a refund.

An advance deposit of \$25.00 is also required of old students who have been out of school for one or more semesters and have been accepted for readmission. It is applied toward payment of the general fee for the semester of readmission. The advance deposit is paid at the time of notification of acceptance and is not refundable.

Students are entitled to one transcript free of charge. Additional copies are supplied at \$1.00 each. Records are not released when the Treasurer's Office reports an unpaid account.

Students may have their bills sent to a parent or guardian provided the Treasurer has been notified in writing with sufficient antecedence. Failure of a student or of a parent or guardian to pay bills on the dates scheduled will debar the student from class attendance until his account is settled in full; subsequent withdrawal does not entitle him to a refund. No student is considered by the Faculty as a candidate for graduation until he has settled with the Treasurer for all his indebtedness to the University. A student who has not settled all his bills with the Treasurer is not allowed to stand the final examinations of the academic year.

Refunds of tuition and other fees are made to students who withdraw within 14 days after the beginning of the semester. On and after the fifteenth day all fees are considered as earned and no refunds are made.

Students who register during the regular academic year for no more than two courses with a maximum credit of 8 semester hours are classified as special students. They are charged a registration fee of \$5.00 for each course, and \$12.00 for each semester hour of course credit. Students taking nine or more hours are charged full fees.

Due to rising costs a readjustment in charges is being considered. In the event of an adjustment applicants will be notified.

Auditors are permitted to attend classes provided they secure the consent of the instructor. They submit no daily work, take no examinations, and receive no credit. Students taking a full program and paying full fees may audit one or more courses without charge. Students not paying full fees are charged \$10.00 for each course each semester.

**ESTIMATED EXPENSES FOR AN ACADEMIC YEAR:** Incidental expenses depend upon the tastes and habits of the individual, but the actual necessary expenses for an academic year are as follows:

	<i>Low</i>	<i>Moderate</i>	<i>Liberal</i>
Tuition .....	\$350.00	\$ 350.00	\$ 350.00
General Fee .....	150.00	150.00	150.00
Room Rent .....	100.00	125.00	175.00
Board .....	325.00	375.00	450.00
Laundry .....	25.00	30.00	35.00
Books .....	20.00	30.00	40.00
	<hr/> \$970.00	<hr/> \$1060.00	<hr/> \$1200.00

The actual fees and expenses necessary for one year in residence as a student in Trinity College, the Woman's College or the College of Engineering can be met within \$970.00.

**STUDENT AID:** Duke University is interested in students with ability and ambition. It is the aim of the University Scholarship Committee and others affiliated with the Student Aid Program to provide, insofar as possible, the financial assistance required by worthy students. This assistance takes various forms. The actual cost to the University for each student exceeds the tuition and fees collected by approximately \$400.00 per year. The deficit is paid out of contributions and income from endowment. Scholarships and prizes enable students with inadequate resources to reduce the amount payable to the University. Loans are made available, and through the Student Employment Offices part-time jobs are arranged. Through the Student Aid Program an earnest effort is made to eliminate the economic status of the student as a criterion for admission.

For details concerning scholarships, awards, loans, and student employment see the *Undergraduate Bulletin*.

**LIVING ACCOMMODATIONS FOR MEN:** Craven, Crowell, and Kilgo Quadrangles on the West Campus are reserved for undergraduate men. Kilgo is assigned to freshmen. The three quadrangles contain thirty-one houses, each designated by a letter of the alphabet. Rooms are single, double, or arranged in suites of two rooms for four students. Each occupant of a double room is charged \$62.50 per semester; the occupant of a single room, \$87.50 per semester.

Rooms may be reserved only for applicants who have been officially accepted by the University. A deposit of \$25.00 is required for reservation. This fee is deducted from the room rental charge at the time of registration for the semester; it is not refunded unless application for the refund is made sixty days prior to the registration date of the semester. Rooms are rented for no shorter period than one semester.

The exchange of rooms may be arranged at the Housing Bureau within fifteen days after the official opening of the semester. Thereafter a charge of \$2.00 will be made. Persons exchanging rooms without the approval of the Housing Bureau will be subject to charges for both rooms.

The authorities of the University do not assume responsibility for the persons selected as roommates. Each student is urged to select the roommate when the room is reserved.

Beds and mattresses (39" x 74"), tables, chairs, dressers, mirrors, and window shades are furnished by the University. The student supplies linens, blankets, pillows, and rugs.

Duke University is particularly eager that its students shall have the best dormitory life to be found in any institution. It has endeavored to provide buildings and equipment commensurate with this ideal. The institution asks and believes that in return each student will respond by arranging his personal belongings in an orderly manner and by caring for the buildings and furniture as he would do in the home of a friend. For dormitory regulations see the *Undergraduate Bulletin*.

**DINING SERVICE:** The dining facilities on the West Campus include three cafeterias with multiple-choice menus, and the Oak Room where full meals and *a la carte* items are served. The cost for the academic year ranges from \$325.00 to \$450.00, depending on the tastes of the individual.

# Registration and Academic Regulations



**ORIENTATION PROGRAM:** All candidates for admission to the freshman class and all other students not in residence the preceding semester are expected to participate in the activities of Orientation Week. The program includes general ability, achievement, and placement tests, orientation lectures, physical examinations, social events, special religious services, registration, and enrollment.

**MATRICULATION AND REGISTRATION:** Students in residence are required to pay an advance deposit of \$25.00 for the following year on or before the date set for spring registration. Students who do not select their courses for the following year at the time appointed must pay a fee of \$5.00 to the Treasurer of the University before their course cards may be approved for the fall. Students whose course cards have been approved in the spring may matriculate by mail during the summer. With the exception of the advance deposit, the same regulations apply to registration for the spring semester.

Students who register in either semester at a date later than that prescribed in the calendar of this Bulletin must pay to the Treasurer a fee of \$5.00. They are counted as absent in the work they have missed in the courses to which they are admitted, and these absences carry the same penalty as do other absences from the course. Changes in courses for reasons not arising within the University require a payment of \$1.00 for each change made. No course may be elected later than two weeks after the opening of the semester, and no student may be admitted to any class without an enrollment card.

## *General Academic Regulations*

**QUANTITY CREDIT AND COURSE LOAD:** The term of credit used is the semester hour, which signifies one recitation a week throughout the semester. Three hours of laboratory work are equivalent to one hour of class work. Two semesters of seventeen weeks each constitute the academic year. For the degree of Bachelor of Science in Engineering, credit for 148 semester hours is required.

In the College of Engineering the normal load is 18 semester hours, exclusive of physical education. No student is permitted to take less

than 14 semester hours of work without special permission from the Dean or to take more than the normal load of work unless his average grade in the preceding semester is higher than C.

**QUALITY CREDIT:** The requirements for the degree are computed not only in semester hours but also in quality points. Quality points are earned by a student on the basis of his grades: for an A he receives three quality points for each semester hour; for a B, two quality points for each semester hour; for a C, one quality point for each semester hour; for a D, no quality points. Credit for at least 148 quality points is required for a degree in Engineering.

To be eligible for graduation, a student of the senior class must complete the work of his senior year with a minimum average grade of C regardless of his average grade in preceding years.

**RESIDENCE REQUIREMENT:** A minimum of 36 semester hours of senior-level work in the College of Engineering must be earned in residence. A student who meets this requirement but who still lacks six to eight semester hours in final fulfillment of requirements may take this work in another institution of approved standing provided that the course is approved by the head of the department concerned and by the Dean. His grades on this work must not be below C.

### *Grading, Attendance, Reports, Dismissal, and Examinations*

**GRADING:** Grades shall indicate one of four conditions:

(1) Passed. A grade of A, B, C, or D shall indicate that a student has passed a course. The work of this group of students is graded according to the following system: A, exceptional; B, superior; C, medium; D, inferior.

(2) Failed. A grade of F indicates that the student has failed the course, and in order to receive credit for the course he must repeat the work in class. He may not take a second examination until he has repeated the course.

(3) Incomplete. (a) A grade of I may be reported by the instructor if for any reason he is unable to report the final grade at the regular time. (b) Incomplete courses must be completed before the close of the succeeding semester; otherwise the I is recorded as F, and the course must be repeated in class if the student is to receive credit for it.

(4) Absent from final examination. (a) The grade X indicates that the student was absent from the regularly scheduled examination. (b) If the absence is excused by the Dean, the student may receive an examination upon the payment of a fee of \$3.00 to the Treasurer



of the University. The instructor concerned arranges for the examination. (c) A student with an X grade who has not obtained a passing grade before the end of the semester following that in which the X was incurred is regarded as having failed in the course concerned and must repeat the work in class in order to receive credit. (d) If a student's absence from an examination is not excused by the Dean, his grade for the course concerned shall be recorded as F.

If a student drops a course without permission from the Dean, the grade for that course shall be recorded as F. If he drops with permission a course in which he is failing at that time, the grade for that course shall be recorded as F unless, in the judgment of the Dean, circumstances do not justify this penalty.

**ATTENDANCE:** Regular and punctual attendance in class work is expected of all students. Weekly reports of all absences from class are to be made by each instructor and filed in the Dean's office. No instructor has the authority to excuse a student from class attendance, and it is his duty to report all absences and tardinesses to the Dean's office. The first three tardies in a given course are counted as one absence, and each succeeding tardy is counted as one additional absence.

To provide for absences due to brief illness or other necessary reasons, one absence per semester hour credit may be incurred in each course during each semester.

Absences due to illness of at least four days' duration and authorized absences for representation of the University may be excused, provided foresight has been used in previous absences.

Sophomores, juniors, and seniors who, in a normal schedule, make averages of B or above in the preceding semester will be allowed two absences per semester hour but will, in all other respects, be subject to the same regulations as other students.

All absences immediately before and after announced holidays are counted as double absences.

For each unexcused, excessive, or consecutive absence the student incurs the loss of quality points in proportion to the number of such absences taken: one quality point for the first absence, two for the second, and three for the third. When the third unexcused, excessive, or consecutive absence is incurred, the student is debarred from the course with the loss of six quality points.

When a student's course load is reduced because of unexcused absences to less than 12 semester hours, he shall be required to withdraw from the University.

**REPORTS:** Reports on class attendance and proficiency in academic work are sent to parents or guardians after the examinations at the end of each semester. In addition, reports on freshmen are mailed at each mid-semester period.



**DISMISSAL:** A student of the freshman class to remain in the University must pass at least 6 semester hours of work in his first semester and 18 semester hours in his first year. All other students must pass at least 9 semester hours each semester. A student who is ineligible to re-enter in September is ineligible to enter the Summer Session.

**EXAMINATIONS:** Final examinations are held in all subjects in January and May.

**DEFICIENCIES IN COMPOSITION:** Any student who must take English 1 and whose score in the English placement test indicates that he is not ready for English 1 must earn a passing grade in English L before being permitted to enter English 1.

Whenever the work of a student in any course is unsatisfactory because of errors in English, the instructor may report the student to the Dean, who will require him to enroll in remedial English until, in the opinion of the Remedial Laboratory, the deficiency is removed.

All instructors are requested to advise their students each semester concerning this regulation.

# Activities



## STUDENT BRANCHES OF ENGINEERING PROFESSIONAL SOCIETIES

The three Departments of the College of Engineering support student branches of the following national professional engineering societies:

*American Institute of Electrical Engineers, American Society of Civil Engineers, American Society of Mechanical Engineers.*

## ENGINEERING STUDENT HONORARY SOCIETIES

Chapters of the following national honorary societies are maintained at Duke:

*Tau Beta Pi* (National Honorary Engineering Fraternity).

*Pi Tau Sigma* (Mechanical Engineering National Honorary Society).

*Order of St. Patrick* (Leadership in Engineering Student Activities).

## ENGINEERING STUDENT PUBLICATION

*The Duke Engineer*, official student-published magazine of the College of Engineering which appears twice each semester, contains articles on technical and semi-technical topics and other matters of interest in the College.

## THE ENGINEERS' CLUB

The Engineers' Club sponsors social activities among students of the College of Engineering.

## GENERAL ACTIVITIES OPEN TO ENGINEERS

The Young Men's Christian Association; Classical Club; Debate Council; Club Panamericano; Duke Masonic Club; Duke University Steering Committee; Duke Players; Duke University Church (Interdenominational); Duke University Handbook and Directory; Freshman Advisory Council; Hoof 'n' Horn Club; Interfraternity Council; Intramural Athletic Department; Pegram Chemistry Club; Quadrangle Pictures; Shoe and Slipper Club; Student Religious Council; Town Boys' Club; G.O. Politan Club; World Student Service Fund; Young Democrats Club; Duke University Instrumental Music Association; Men's Glee Club; The University Chapel Choir; *The Archive* (Monthly); *Chanticleer* (Annual); *Chronicle* (Weekly); *Duke 'n' Duchess* (Monthly Humor).

## HONORARY SOCIETIES

In addition to the national engineering student honorary societies, students of the College of Engineering are eligible for membership in the following national honorary societies:

*Phi Beta Kappa* (Scholarship); *Sigma Xi* (Scientific Research); *Omicron Delta Kappa* (Leadership—Men); *Phi Eta Sigma* (Freshman Scholarship); *Pi Mu Epsilon* (Mathematics); *Sigma Pi Sigma* (Physics); *Sigma Delta Pi* (Spanish); *Tau Kappa Alpha* (Forensic); *Tau Psi Omega* (French); *Theta Alpha Phi* (Dramatic); *Delta Phi Alpha* (German).

Local honorary societies for which engineers are eligible include: *9019* (Scholarship); *Red Friars* (Leadership); *Beta Omega Sigma* (Sophomore Leadership); *Tombs* (Athletic).

## NATIONAL SOCIAL FRATERNITIES

Alpha Tau Omega; Beta Theta Pi; Delta Sigma Phi; Delta Tau Delta; Kappa Alpha; Kappa Sigma; Lambda Chi Alpha; Phi Delta Theta; Phi Kappa Psi; Phi Kappa Sigma; Pi Kappa Alpha; Pi Kappa Phi; Sigma Alpha Epsilon; Sigma Chi; Sigma Nu; Sigma Phi Epsilon; Theta Chi; Zeta Beta Tau.

## HONORS

To be eligible for Honors, a student must earn during the year a credit of not less than thirty semester hours. Students in the freshman, sophomore, and junior classes who earn an average of at least two and one-half quality points per semester hour are given Honors. All semester hours on which a student receives a grade are counted in the determination of Honors.

The degree of Bachelor of Science in Civil, Electrical, or Mechanical Engineering with distinction is conferred under the following rules:

Students who have completed a minimum of ninety semester hours in Duke University are eligible for general Honors at graduation. Those who earn an average of at least two and one-half quality points per semester hour are recommended for a degree *magna cum laude*. Those who earn an average of at least two and three-fourths quality points per semester hour are recommended for a degree *summa cum laude*. All semester hours taken in Duke University on which a student receives a grade are counted in the determination of Honors.

## PRIZES

*The Sigma Xi Prize:* The Society of the Sigma Xi, national scientific research society, is devoted to the encouragement of scientific research and seeks to stimulate those who show promise of accomplishment in this field. As an encouragement to younger men and women the Duke Chapter of Sigma Xi has established several prizes to be awarded annually, among them a prize for an outstanding undergraduate project or paper.

*Julia Dale Prize in Mathematics:* This is a prize of books given annually to the undergraduate who shows the greatest proficiency in the study of the calculus.

*The Milmow Prize:* This prize, consisting of one year's subscription to the *Electrical World*, is awarded each year to that student from North or South Carolina graduating in the Department of Electrical Engineering, who, in the opinion of the faculty of that department and as shown by his grades, has made the most progress in electrical engineering during his last year in college.

*The Tau Beta Pi Prize:* The North Carolina Gamma Chapter of Tau Beta Pi, national honorary engineering fraternity, awards each year a suitable prize, such as an engineering handbook, to a sophomore student in engineering for outstanding scholastic achievement during the freshman year.

*The William Senhauser Prize* is given by his mother in memory of her son, a member of the class of 1942, who lost his life in the Pacific Theatre of War on August 4, 1944. The award is made annually to the sophomore or junior in Trinity College or the College of Engineering who has made the greatest contribution through participation and leadership in intramural sports. The winner of this prize is chosen by a committee selected by the President of the University.

### STUDENT BROADCASTING SYSTEM

The student broadcasting system of the University is under the control of a Radio Council, which is constituted as follows: two members from the University staff, appointed by the President; three members from the faculty who serve as engineering, production, and business advisers; three men from the junior and senior classes, including one engineer, elected by the students in Trinity College and the College of Engineering; one woman from either the junior or senior class, elected by the students of the Woman's College; one man from either the junior or senior class, elected by the members of the Student Legislature of the Men's Student Government Association from within the membership of that body; one woman from either the junior or senior class, elected by the members of the Woman's Student Government Association from within the membership of that body; and four student managers of the student broadcasting system, *ex officio* members without voting power.

### *The Bureau of Testing and Guidance*

The University maintains a Bureau of Testing and Guidance. In it are centralized the counseling and guidance programs for students. It is responsible for the administration of various testing programs throughout the year. Included in the responsibilities of the Bureau

are admission tests, placement tests, vocational series, other specialized programs including the Graduate Record Examination, the Navy College Aptitude Test, the Medical College Admissions Test, and specific testing programs requested by the schools and colleges within the University.

### *Appointments Office*

The Appointments Office is a service agency designed to aid graduates in solving the problem of post-college employment. Its primary function is to serve as an intermediary between students and prospective employers. It acquaints students with possibilities in business and professional fields; it assembles comprehensive records on each registrant and makes these records available to appropriate representatives; and it arranges interviews with prospective employers. The data assembled for individual records include academic achievement, training, experience, extracurricular activities, honors, and potential ability as revealed by scores on mental, personality, and interest tests. On occasion additional information of a specialized nature is secured. Confidential letters of recommendation are incorporated in the file of each registrant. The Office initiates contacts for students or cooperates with students who make contacts through personal efforts or through various departments of the University. It aids the registrant in directing his search to a field appropriate to his aptitude, training, and interest.

There are two major divisions of the Office: (1) the Commercial Division, which handles all matters involving contacts with business and professional areas not related to formal education; and (2) the Educational Division, which concerns itself with teaching and school administration positions at all levels. Students and alumni may register with either or both of these divisions.

The Office receives more calls for qualified personnel than it can supply from its registrants—in 1949-1950 it was able to satisfy less than one-third of the 2,700 requests made by prospective employers. It is to the mutual advantage of the students and the Office that a complete record of registrants be assembled by the fall of the senior year.



# Reserve Officers Training Corps



THROUGH the Naval and Air Force Reserve Officers Training Program the University is cooperating with the Department of National Defense in the effort to provide a steady supply of well-educated officers for the active and reserve forces of the Nation.

THE NAVAL RESERVE: Scholarships are awarded to candidates selected as a result of an annual nation-wide test and selection procedure. These men are designated as Regular NROTC Students and are appointed Midshipmen, USNR. The scholarship covers the cost of tuition, fees, and textbooks. NROTC Midshipmen receive retainer pay at the rate of \$600 per year. The Navy furnishes necessary uniforms and equipment.

Normally students will attend college for four years while in the NROTC. They may take any course leading to a baccalaureate or higher degree, except that Midshipmen entering in 1950 and thereafter may not pursue courses leading to degrees in pre-medicine, pre-dentistry, pre-theology, medicine, dentistry, or theology. They must include in their courses of study 24 semester hours of Naval Science plus certain minimum requirements in mathematics, physics, and English. They will wear the uniform only when engaged in drills or other Naval Activities prescribed by the Professor of Naval Science and, except for the ordinary requirements of gentlemanly behavior, will be subject to Naval discipline only at those times. They are required to make two summer cruises at sea and to attend one summer training period of amphibious and aviation indoctrination. Upon graduation Regular NROTC students must accept a commission as Ensign, USN, or Second Lieutenant, USMC, if offered, and will be ordered to active duty for a period of 15-24 months. After fifteen months' service those so desiring may request an additional year of active duty and apply for permanent retention in the services as career officers. Those who do not desire to remain as career officers must accept a commission in the Reserve of the appropriate service and remain in the Reserve at least until the sixth anniversary of their first commission. Reserve Officers are not called to active duty except during a declared emergency or war, unless at their own request.

A second type of officer candidate in the NROTC is the Contract NROTC Student. These students are selected from qualified stu-



dents regularly enrolled in Duke University. They have the status of civilians who have entered into a mutual contract with the Navy. They do not receive the compensation or benefits paid the Regular NROTC Student, but are furnished uniforms, Naval Science textbooks and equipment; and a subsistence allowance (currently 90 cents per day) during the final two years of NROTC training. Contract students make one training cruise, during which they receive active duty pay. Contract students on graduation must accept a commission in the Naval or Marine Corps Reserve, but may, if they so desire and their services are required, request active duty and a commission in USN or USMC. If ordered to active duty they then are eligible for selection as career officers under the same provisions as graduating NROTC Regulars.

Under the provisions of the Selective Service Act of 1948, Regular NROTC Students who serve a period of active duty as an integral part of their training under Public Law 729 are deferred from Selective Service. Contract Students, by virtue of an agreement to accept a commission on graduation and to serve on active duty if required, are deferred from Selective Service. All NROTC Students are considered on *inactive* duty in the Naval Reserve while in college, and such service may *not* be counted for exemption or deferment should a student be separated from the program for any reason.

**THE AIR FORCE RESERVE:** The unit functions as a regular department of instruction known as the Department of Air Science. It selects and trains students who possess the requisite character, intelligence, desire, and sense of duty to become Air Force Officers.

For enrollment in the Basic Course (freshman and sophomore years) the student must be a male citizen of the United States; be physically qualified under standards prescribed by the Air Force. Due allowance will be made for defects which are correctible prior to the student's eligibility for appointment as a commissioned officer; be accepted by the institution as a regularly enrolled student; be not less than 14 years of age and not have reached 23 years of age at the time of enrollment; and successfully complete such general survey and screening tests as may be prescribed.

For enrollment in the Advanced Course (junior and senior years) the student must have successfully completed the Basic Course or have had at least one year of honorable service; execute a written agreement with the government to complete the Advanced Course, contingent upon remaining in school, and to attend the Advanced Summer Camp at the time specified; not have reached 27 years of age at the time of initial enrollment in the Advanced Course; successfully complete such general survey and screening tests as may be prescribed; and be selected by the Professor of Air Science and Tactics and the appropriate authority of the institution.

All uniforms, texts, and training equipment required for the Air Science Course are furnished at government expense, and students are paid a total of approximately \$600 for the two years of the Advanced Course.

Upon graduation and completion of the Advanced Course, students will be offered commissions as Second Lieutenants in the Air Force Reserve. Outstanding students will be offered lifetime careers in the Regular Air Force. Flying training is available after graduation for those who desire it and are physically qualified.

A student enrolled in Air Force ROTC is eligible for deferment from the Draft.

# The Degree of Bachelor of Science in Engineering



THE studies in the College of Engineering are designed for students who are preparing for civil, electrical, or mechanical engineering as a profession. These studies lead to the following degrees: B.S. in C.E., B.S. in E.E., and B.S. in M.E. All curricula of the College are fully accredited by the Engineers' Council for Professional Development.

## *Uniform Requirements*

Each of these degrees requires 148 semester hours of work, four of which are in physical education. A student must have at least a C average both for the entire program and in his senior year.

Besides the courses in their special fields, the three departments of the College—the Civil, the Electrical, and the Mechanical—require (1) a uniform program during the student's first year and (2) supplementary work in general courses throughout his last three years. The general courses are listed below. The special program of each department is given in the section of this Bulletin devoted to the specific department.

Air Force Reserve Officers' Training Corps and Naval Reserve Officers' Training Corps students who are majoring in engineering take the standard programs of their departments of specialization with certain exceptions that are noted under the respective departments.

## *General Courses of Instruction*

### REQUIRED NONENGINEERING SUBJECTS

CHEM. 1-2. GENERAL INORGANIC CHEMISTRY.—Lectures, recitations, and laboratory work on the elementary principles of chemistry and on the occurrence, preparation, properties, and uses of the elements and their compounds. One lecture, two recitations, and three laboratory hours, throughout the year. 8 s.h.

ECON. 51-52. PRINCIPLES OF ECONOMICS.—For sophomores. 6 s.h.

ENGL. L. ENGLISH FUNDAMENTALS.—All freshmen whose scores on the placement tests indicate that they are not ready for English I must take this course. Students who fail in English L must repeat the course. Students who have earned credit in English L must also take English 1 and 2. 3 s.h.

ENGL. 1-2. ENGLISH COMPOSITION.—All freshmen are required to take course 1 and course 2. 6 s.h.

ENGL. E93. ADVANCED COMPOSITION FOR ENGINEERS.—Designed for achieving effectiveness in writing reports, descriptions, technical investigations, etc. Open to juniors and seniors. 3 s.h.

ENGL. 151. ESSENTIALS OF PUBLIC SPEAKING.—A basic course in public speaking designed to give the poise and confidence necessary to think and speak freely before an audience. Particular attention is paid to the gathering and organization of speech materials and to oral presentation. 3 s.h.

HIST. E1-2. THE UNITED STATES IN THE WORLD TODAY.—This course is designed for students in the College of Engineering. Topics treated in the first semester are: the rise of national states in Western Europe and other circumstances attending the discovery and settlement of the New World; the foundation of American institutions; the establishment of the Federal Republic; the frontier, the westward movement, and contemporary international developments; the Civil War; the growth of industry and its influence on society; the Spanish-American War and the emergence of the United States as a world power. In the second semester the emphasis is on the growing interdependence of the Western Nations in the twentieth century; their influence throughout the world; the participation of the United States in the World Wars, and the resultant problems of today. 6 s.h.

MATH. 1. INTERMEDIATE ALGEBRA.—Elementary topics, factoring, fractions, linear equations in one, two, and three unknowns, functions and graphs, exponents and radicals, elements of quadratic equations. Prerequisite: one unit in algebra and one unit in geometry. Required before Math. 5 when necessary. 3 s.h.

MATH. 5. COLLEGE ALGEBRA.—Advanced topics in quadratic equations, systems involving quadratics, variation, binomial theorem, progressions, inequalities, theory of equations, permutations and combinations, probability, determinants, partial fractions. This course and Mathematics 6 may be taken concurrently. 3 s.h.

MATH. 6. PLANE TRIGONOMETRY.—Logarithms, right and oblique triangles, radian measure, graphs of trigonometric functions, inverse trigonometric functions, trigonometric identities and equations, complex numbers. This course and Mathematics 5 may be taken concurrently. 3 s.h.

MATH. 50. PLANE ANALYTIC GEOMETRY.—Rectangular and polar coordinates, loci, straight lines, conic sections. This course and Mathematics 51 may be taken concurrently. Prerequisites: Mathematics 5 and 6. 3 s.h.

MATH. 51. CALCULUS I.—Differentiation of elementary functions, curve tracing, maxima and minima, motion. Must be preceded or accompanied by Mathematics 50. 3 s.h.

MATH. 52. CALCULUS II.—Integration of elementary functions, areas, solids of revolution, length of arc, surfaces of revolution, centroids, moments of inertia, pressure, curvature, indeterminate forms. Prerequisite: Mathematics 51. 3 s.h.

MATH. 53. CALCULUS III.—Introduction to solid analytic geometry, partial differentiation, multiple integrals, series, introduction to differential equations. Prerequisite: Mathematics 52. 3 s.h.

MATH. 131. ELEMENTARY DIFFERENTIAL EQUATIONS.—Solution of elementary types; formation and integration of equations arising in applications. Prerequisite: Mathematics 52. 3 s.h.

PHYS. 51-52. GENERAL PHYSICS.—This course treats the basic principles of general physics in a more quantitative manner than Physics 1-2. It is designed for sophomores and juniors and meets in a thorough way the requirements for entrance into the study of either medicine or engineering and is well suited for the general science student. A limited number of freshmen who present physics for entrance and who are taking the required mathematics concurrently may be admitted by permission of the instructor. This course is not open for credit for students who have taken Physics 1-2. Four lecture-recitations and one three-hour laboratory period each week. Prerequisite: Mathematics 5-6 or equivalent (Mathematics 5 may be taken concurrently). 10 s.h.

## AIR SCIENCE COURSES

The following courses are required of students in the Air Force Reserve Officers' Training Corps, as outlined in the various curricula:

AS 11-12. DEVELOPMENT OF THE ARMED FORCES. CONCEPTS OF AIR POWER. AND MAINTENANCE OF INSTALLATIONS.—An introductory course which traces the history and development of current military concepts and deals with the analysis of military power on the basis of population, environment, and political behavior. The responsibilities of the Air Installations officer for providing fire protection, grounds maintenance, refuse disposal, and pest control at air bases are studied. 6 s.h. STAFF

AS 61-62. APPLIED AIR POWER AND ELEMENTS OF AIR INSTALLATIONS.—During the first semester the principles of military logistics and administration, military teaching methods, and air force management are taught. The second semester is allotted to air operations and the functions and organization of the air installations office. Prerequisites: AS 11-12 or equivalent. 6 s.h.

AS 111-112. AIR INSTALLATIONS AND MAINTENANCE ENGINEERING.—This is the first year of the advanced course in air science for engineering students and is applied to specialized instruction in the field of installation and maintenance engineering. The first semester covers the construction of bases and landing fields, roads, railroads and sewage disposal plants; the disposal of refuse and the control of insects and rodents. The second semester is allotted to fire prevention and crash rescue, electrical facilities, water supply, and preventive maintenance. Prerequisites: AS 11-12, 61-62 or equivalent. 8 s.h.

AS 211-212. ADVANCED AIR INSTALLATIONS.—Not offered in 1950-1951. Prerequisites: AS 11-12, 61-62 or equivalent, AS 111-112. 2 s.h.

## NAVAL SCIENCE COURSES

The following courses are required of students in the Naval Reserve Officers' Training Corps, as outlined in the various curricula:

(Standardized titles and designators for courses are established by the Bureau of Naval Personnel for use at the 52 NROTC Institutions. The first digit indicates the year of the course; the second digit indicates whether semester or quarter (0 for semester, 1 for quarter); the third digit indicates the semester or quarter of school year in which offered. Specialized courses for Marine Corps officer candidates are indicated by the letter "M" after the designator, and substitute for the basic course of the same number.)

NS-101. NAVAL ORIENTATION.—Organization for national security; the naval establishment and the operating forces; naval customs, traditions, regulations; basic characteristics, capabilities, and limitations of naval vessel types; nomenclature; introduction to carrier air, surface, undersea, and amphibious warfare; basic leadership. 3 s.h.

NS-102. NAVAL ORIENTATION.—American sea power since 1775; the elements of sea power; applications of sea power in campaigns of the two World Wars; deck seamanship, rules of the nautical road, naval formations and maneuvers. 3 s.h.

NS-201. NAVAL WEAPONS.—Evolution of naval ordnance; types and properties of explosives; principles in design and assembly of guns, ammunition, fuses; automatic weapons; basic designs in torpedoes, mines, anti-submarine devices, rockets; principles in the control of fire of naval weapons against air, surface, and underwater targets; nuclear explosives. 3 s.h.

NS-202. NAVAL WEAPONS.—The elements in the problem of control of naval gun fire, the principles of mechanical and electronic solution of the problems; basic principles, capabilities and limitations of radar, sonar, and guided missiles; shore bombardment. 3 s.h.

NS-301. NAVIGATION.—Magnetic and gyro compass; principles of chart construction; the sailings and dead reckoning; piloting; electronic and radar navigation;



relative motion; rules of the nautical road; basis aerology and meteorology; maneuvering in storm areas. 3 s.h.

NS-302. NAVIGATION.—Nautical astronomy including a study of the actual and apparent motion of earth, celestial coordinates, time systems, solutions of the astronomical triangle; solutions of observations for lines of position; use of the sextant; identification of stars and planets; complete day's work in practical navigation. 3 s.h.

NS-302M. HISTORY OF THE ART OF WAR.—The development of tactics and material as shown by decisive battles of history; historical causes and effects of wars; the development of United States military policy; total war; briefs of campaigns of World War II. 3 s.h.

NS-401E. NAVAL MACHINERY, SHIP STABILITY.—Applications of standard steam, electrical, and internal combustion machinery for marine propulsion and ship operation; the principles of ship stability and buoyancy in the practice of ship design and in the practice of damage control. 1 s.h.

NS-401M. UNITED STATES MILITARY HISTORY AND POLICY.—The development of U. S. military policy, the tactics of U. S. forces in selected battles, current policy and functions of the armed services. 3 s.h.

NS-402M. AMPHIBIOUS WARFARE.—History of amphibious warfare and its development, principles of amphibious techniques, and applications of these principles in selected examples. 3 s.h.

## *General Engineering Subjects*

1. ENGINEERING DRAWING.—The study of mechanical drawing with emphasis on third angle projection, pictorial drawing, dimensioning, working drawings, pencil and ink techniques. 2 s.h.

2. DESCRIPTIVE GEOMETRY.—A study of drawing board geometry with emphasis on line and plane problems, developments, and intersections. Further emphasis on drawing techniques. Prerequisite: GE 1. 2 s.h.

57. STATICS.—Concurrent forces, parallel forces, nonconcurrent and nonparallel forces, centroids, friction, moment of inertia. Prerequisites: GE 1, GE 2. Mathematics 52 concurrent. 3 s.h.

58. DYNAMICS.—Translation, rotation, work, energy, and momentum. Prerequisites: GE 57 and Mathematics 52. 3 s.h.

101. \*CONSTRUCTION METHODS.—Principles of scientific management as set forth by Gilbreth and Taylor; selection of materials and accumulation of cost data; use of modern equipment and methods; job design, description, selection and placement of personnel. Prerequisite: Junior standing. 3 s.h.

102. \*MOTION AND TIME STUDY.—Fundamentals of stop-watch time study; effort (tempo) rating; uses of time study, and relationships between time study, motion study, and wage incentives; micromotion study; motion economy principles and their applications; standard data—derivation and application. Prerequisite: Junior standing. 3 s.h.

107. STRENGTH OF MATERIALS.—Elastic bodies under stress; flexure of simple, overhanging, fixed, and continuous beams; columns; combined stresses, etc. For Civil Engineering students, the laboratory work is included in course CE 118. Other students should take course GE 109 for laboratory. Prerequisite: GE 57. 3 s.h.

109. STRENGTH OF MATERIALS LABORATORY.—Concurrent with course GE 107. 1 s.h. Either semester.

128. HYDRAULICS.—Hydrostatics; flow of water through orifices, weirs, pipes, and open channels; general principles of water wheels and turbines. Prerequisite: GE 57. 3 s.h. Either semester.

\* Offered only upon sufficient demand; enrollment limited.



# Department of Civil Engineering



HAROLD CRUSIUS BIRD, Chairman  
*Professor*

WILLIAM HOLLAND HALL  
*Professor*

WILLIAM BREWSTER SNOW  
*Associate Professor*

HOWARD N. HAINES  
*Assistant Professor*

RALPH E. LEWIS  
*Assistant Professor*

AUBREY E. PALMER  
*Assistant Professor*

JAMES WESLEY WILLIAMS  
*Assistant Professor*

CHANDLER WILCOX BROWN  
*Instructor*

JESSE HOLLAND WILDER  
*Instructor*

THE work of a civil engineer may be divided into four major fields: sanitation—dealing with water works, sewerage systems, and garbage disposal; hydraulics—dealing with flood control, river improvements, irrigation, drainage, and water power; transportation—dealing with railroads, highways, airports, waterways, park systems, traffic control, and city planning; structures—dealing with bridges, buildings, foundations, dams, tunnels, tanks, bins, and various industrial structures. The concern of a civil engineer is primarily with design and construction, although often his responsibility includes maintenance. His undergraduate education comprises scientific, technical, civic, and cultural subjects. In order that he may become qualified to assume responsible charge of engineering work, he should supplement this instruction with progressive study after he graduates and while he is securing his practical experience.

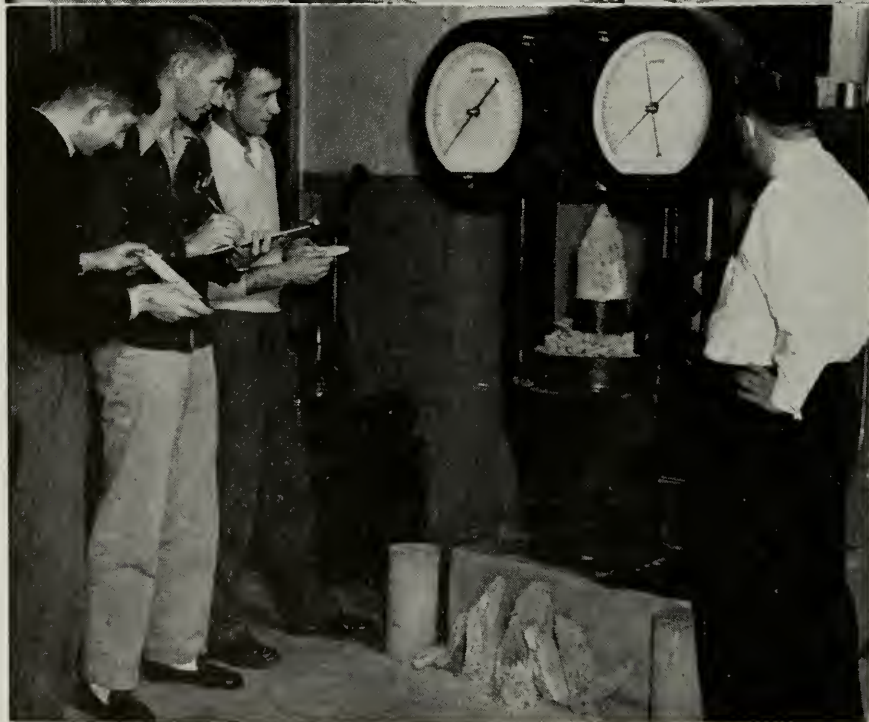
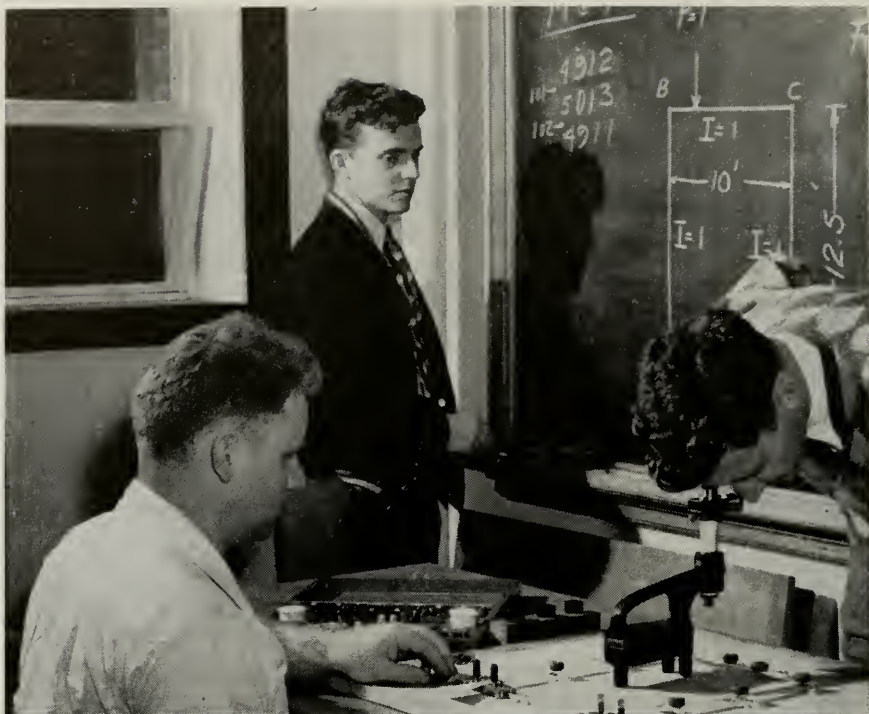
The various facilities of the department are described below.

## HIGHWAY MATERIALS

Complete equipment is available for the preparation and routine testing of aggregates, cement, and bituminous materials. There is also a Hubbard stability machine for additional tests.

## SANITARY ENGINEERING

In the sanitary laboratory there is complete equipment for performing the physical, chemical, bacteriological, and microscopic tests as outlined by the American Public Health Association. Different types of water current meters are available for work in stream gauging.



### SURVEYING

The department has an unusually modern and representative collection of transits, levels, plane tables, accessory equipment, as well as a precise level and theodolite.

### CIVIL ENGINEERING DRAFTING ROOM

A special drawing room has been set aside for upperclassmen in civil engineering. The room is specially illuminated with fluorescent lights and has properly conditioned two-toned walls to relieve eye strain. Filing cabinets for storing each student's equipment, eight large-sized universal drafting machines, numerous smaller-sized ones, planimeters, curves, and other accessories are readily available.

### STRESS LABORATORIES

For advanced instruction in stress analysis there are various polariscopes with facilities for taking and developing pictures, large-sized Begg's deformeter, loading frames, and miscellaneous tools for preparing accurate models for testing. Electric calculating machines are to be found in an adjoining room so that the students may more readily compare calculated and experimental results.

### CEMENT AND CONCRETE TESTING

For the testing of cement, fine and coarse aggregates, and concrete, two rooms and an adjoining closet are provided, the closet being equipped with temperature and moisture control. In addition to the small accessories there is an automatic shot-testing briquette machine, flow table, Ro-tap shaker, steam baths, unit weight measures, capping devices, special equipment for making the flexural test, as well as a new 300,000-pound hydraulic compression machine.

### SOIL TESTING

For the classification of soils there is standard equipment for finding the liquid limit, plastic limit, shrinkage limit, field moisture equivalent, centrifuge moisture equivalent, specific gravity, sieve analysis using Ro-tap shaker, and hydrometer analysis using a constant temperature bath. In making foundation studies, permeability is measured by constant and variable head permeameters and by horizontal capillarity; shearing values are determined by unconfined compression tests, four modern shear machines as well as by two triaxial shear machines; bearings values are found by the Proctor and California bearing tests; consolidation and settlement forecasts are made from data secured on three consolidation machines. New laboratory tables will accommodate twenty students. Drying racks, electric ovens, and other accessories of the latest types are to be found in this laboratory. Adjacent to the main laboratory are two smaller rooms available for research work in soils.

## MATERIALS LABORATORY

This laboratory is equipped to give instruction in the basic principles of stress and strain and for the testing of structural members. Its facilities are adequate for both graduate and undergraduate instruction. Included in this laboratory are three universal testing machines with capacities from 5,000 to 150,000 pounds; various hardness testers; machines for torsion, fatigue, and impact; calibration apparatus; and a variety of modern strain gauges of direct acting mechanical and electric-resistance types.

## *Program of Studies for the Degree of Bachelor of Science in Civil Engineering*

### *Freshman Year*

FIRST SEMESTER			SECOND SEMESTER		
		S.H.			S.H.
Math 5	College Algebra	3	Math 50	Analytic Geometry	3
Math 6	Trigonometry	3	Math 51	Calculus I	3
Chem 1	Chemistry	4	Chem 2	Chemistry	4
Engl 1	English Composition	3	Engl 2	English Composition	3
Hist E1	History	3	Hist E2	History	3
GE 1	Drawing	2	GE 2	Descriptive Geometry	2
	Physical Education	1		Physical Education	1
		19			19

For Air Force ROTC students AS 11 (3 s.h.) is substituted for Hist E1 and AS 12 (3 s.h.) is substituted for Hist E2 above.

For Naval ROTC students NS 101 (3 s.h.) is substituted for Hist E1 and NS 102 (3 s.h.) is substituted for Hist E2 above.

### *Sophomore Year*

FIRST SEMESTER			SECOND SEMESTER		
		S.H.			S.H.
Math 52	Calculus II	3	Math 53	Calculus III	3
Phys 51	Physics	5	Phys 52	Physics	5
Econ 51	Economics	3	Econ 52	Economics	3
GE 57	Statics	3	GE 107	Strength of Materials	3
CE 61	Surveying	4	CE 62	Surveying	4
	Physical Education	1		Physical Education	1
		19			19

For Air Force ROTC students AS 61 (3 s.h.) and AS 62 (3 s.h.) are substituted for Econ 51-52 above.

For Naval ROTC students NS 201 (3 s.h.) and NS 202 (3 s.h.) are substituted for Econ 51-52 above.

### *Junior Year*

FIRST SEMESTER			SECOND SEMESTER		
		S.H.			S.H.
Engl 93	Advanced Composition	3	Engl 151	Public Speaking	3
GE 58	Dynamics	3	GE 128	Hydraulics	3
CE 131	Structures	5	CE 132	Structures	5
CE 113	Route Surveying	3	CE 118	Materials	3
EE 123	Electric Circuits	4	EE 124	Electric Machinery	4
		18			18



For Air Force ROTC students AS 111 (4 s.h.) and AE 112 (4 s.h.) are substituted for Engl 93 and Engl 151 above.

For Naval ROTC students NS 301 (3 s.h.) and NS 302 (3 s.h.) are substituted for Engl 93 and Engl 151 above.

### Senior Year

FIRST SEMESTER		S.H.	SECOND SEMESTER		S.H.
CE 123	Water Supply .....	4	CE 124	Water Purification .....	3
CE 135	Soils .....	3	CE 116	Highways .....	3
CE 133	Reinforced Concrete .....	4	CE 140	Indeterminate Structures ..	3
ME 103	Heat Power .....	3	CE 144	Projects .....	2
ME 115	Mech. Eng. Laboratory ....	1	ME 104	Heat Power .....	3
	Elective (Non-Technical) ..	3	ME 116	Mech. Eng. Laboratory ....	1
		—		Elective (Non-Technical) ..	3
		18			—
					18

For Air Force ROTC students AS 211 (1 s.h.) is added to the first semester program and AS 212 (1 s.h.) is added to the second semester program above.

For Naval ROTC students who are candidates for a Navy commission NS 401E (1 s.h.) is added to the second semester program.

For Naval ROTC students who are candidates for a Marine Corps commission NS 401M (3 s.h.) and NS 402M (3 s.h.) are substituted for the two non-technical electives above.

### Courses of Instruction

61. PLANE SURVEYING.—Use of instruments; transit, stadia and compass surveying; determination of meridian by observation on Polaris; differential and profile leveling; setting grade stakes; calculation of bearings, latitudes, departures and areas; methods of plotting; survey and plot of portions of campus by stadia, and transit and tape; care and adjustment of instruments. Prerequisites: GE 1 and Math 6. 4 s.h. MR. BROWN

62. ADVANCED SURVEYING.—Simple triangulation; topographic surveying using stadia and plane table; laying out and division of land; public land system; calculations; grading plans and quantities; determination of azimuth by H.O. 211. Prerequisite: CE 61. 4 s.h. MR. BROWN

108. \*ADVANCED STRENGTH OF MATERIALS.—Applications of Mohr's circle, deflections, and energy of strain to advanced problems. Prerequisite: GE 107. 3 s.h. ASSISTANT PROFESSOR WILLIAMS

5110. PLANE SURVEYING.—The equivalent of CE 61 given especially for students in forestry. See *Bulletin of Summer Session*. 4 s.h. MR. BROWN

113. ROUTE SURVEYING.—Thorough drill in the calculation and laying out of simple, compound, and easement curves; widening of curves; vertical curves; setting slope stakes; ordinary earthwork computations and mass diagrams. Prerequisite: CE 61. 3 s.h. ASSISTANT PROFESSOR WILLIAMS

116. HIGHWAY ENGINEERING.—Location, design, construction and maintenance of highways and city streets; soil stabilization; traffic studies; economics of planning and design. Prerequisites: CE 113, CE 135. 3 s.h. ASSISTANT PROFESSOR WILLIAMS

118. MATERIALS OF ENGINEERING.—Study and testing of materials commonly used in civil engineering; proportioning concrete. Prerequisite: GE 107 or concurrent. 3 s.h. ASSISTANT PROFESSOR WILLIAMS

\* Offered only upon sufficient demand; enrollment limited.

120. \*ENGINEERING STATISTICS.—Statistical methods applied to engineering problems. Typical engineering data analyzed to illustrate arithmetically and geometrically normal distributions; binomial distribution; Poisson's distribution. Testing data of engineering materials and the use of student's distribution. Sequential analysis and control of production quality. 3 s.h.

ASSOCIATE PROFESSOR SNOW

121. \*HYDROLOGY.—Fundamentals of meteorology; precipitation; evaporation. Ground water development. Stream flow and stream gaging. Hydrograph analysis. Flood control. Field trips to be arranged. Prerequisite: GE 128. 3 s.h.

ASSOCIATE PROFESSOR SNOW

123. WATER SUPPLY AND SEWAGE.—Statistical analysis of rainfall and run-off records; population estimation; analysis of the yield of watersheds and storage requirement; design of water distribution systems; design of sanitary and storm sewerage systems. Prerequisite: GE 128. 4 s.h.

ASSOCIATE PROFESSOR SNOW

124. WATER PURIFICATION AND SEWAGE TREATMENT.—Chemical and bacteriological analysis of water and sewage effluents; design of water purification treatment systems; design of sewage treatment plants. Prerequisite: CE 123. 3 s.h.

ASSOCIATE PROFESSOR SNOW

128. \*INDUSTRIAL WATER SUPPLIES.—Water quality for industrial uses. Analytical techniques and interpretation of results. Boiler feed water requirements; softening; ion exchange; deaeration, priming; foaming; corrosion; embrittlement. Control of treatment processes. Prerequisite: Chemistry 1-2. 3 s.h.

ASSOCIATE PROFESSOR SNOW

129-130. \*ELEMENTARY STRUCTURES.—Stresses in beams and trusses for fixed and moving loads. Deflection of beams and trusses. Design of tension, compression, and flexural members; connections; and plate girders. Design of reinforced concrete beams, slabs, columns, footings, and retaining walls. (For students not majoring in Structural Engineering.) Prerequisite: GE 107. 6 s.h.

ASSISTANT PROFESSOR PALMER

131. STRUCTURES.—ANALYSIS AND ELEMENTARY DESIGN.—Stresses in roofs, parallel and inclined chord bridges, including sub-divided panels, by algebraic and graphic methods under all conditions of loading; shear and moments in frames and bents; influence lines; Williot diagram. Structural drafting; details in steel and wood; methods of fabrication and erection. Prerequisites: GE 57, 107. 5 s.h.

ASSISTANT PROFESSOR PALMER

132. STRUCTURES.—DESIGN.—Tension, compression, flexural members, end posts, eccentric connections, unsymmetrical bending; riveted and welded plate girders; trusses and office building frames; wind analysis. Design and detail drawings. Prerequisite: CE 131. 5 s.h.

ASSISTANT PROFESSOR PALMER

133. REINFORCED CONCRETE.—Theory and design of reinforced concrete beams, slabs, and columns including eccentric loads; footings; retaining walls. Prerequisite: GE 107. 4 s.h.

PROFESSOR BIRD

135. SOIL MECHANICS.—Identification and classification; flow nets; frost action; stability of foundations, cuts and embankments, and retaining walls; settlement. Laboratory includes identification, permeability, shear, unconfined compression, consolidation and compaction tests. Prerequisite: GE 107. 3 s.h.

PROFESSOR BIRD

137-138. \*SEMINAR.—Students are required to make reports and to talk on current engineering literature or on such other topics as may be assigned. 2 s.h.

ASSISTANT PROFESSOR PALMER

140. INDETERMINATE STRUCTURES.—Application of least work, slope deflection, moment distribution, and column analogy. Analytic, graphic, and experimental methods are used. Prerequisites: CE 131, CE 133. 3 s.h.

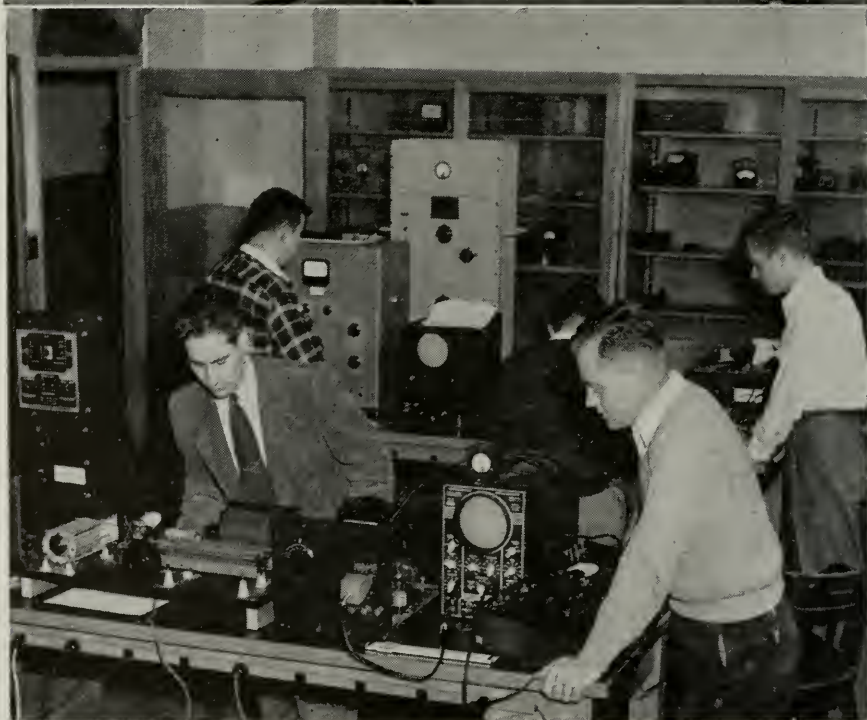
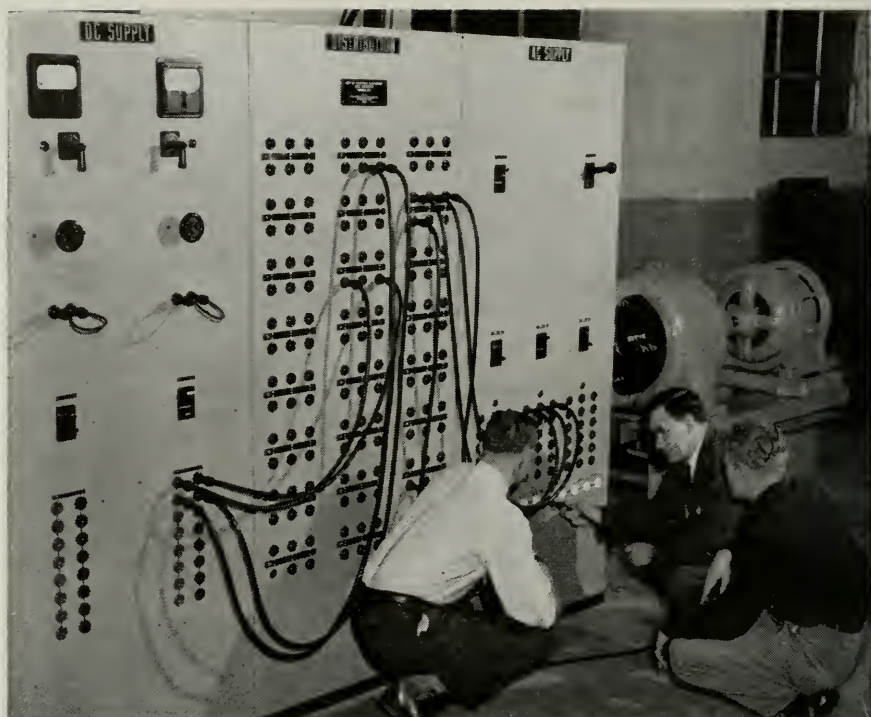
PROFESSOR BIRD

\* Offered only upon sufficient demand; enrollment limited.



142. \*HYDRAULIC ENGINEERING.—Statical and dynamical principles of fluids applied to specific engineering problems. Effects of gravity, viscosity, compressibility, and surface tension on fluid motion in closed conduits and open channels; surface and form resistance; dimensional analysis and theory of models. Non-uniform flow in open channels. Hydraulic jump, backwater curves. Hydraulic problems of flood control, flood routing. Dam design. Prerequisite: GE 128 or ME 105. 3 s.h.  
ASSISTANT PROFESSOR WILLIAMS

143-144. PROJECTS IN CIVIL ENGINEERING.—This course may be assigned by the Chairman of the Department to certain seniors who have shown an aptitude for research in one distinct field of civil engineering, in which case it may be substituted for certain general civil engineering courses. 2-6 s.h.  
STAFF



# Department of Electrical Engineering



WALTER JAMES SEELEY, Chairman  
*Professor*

OTTO MEIER, JR.  
*Associate Professor*

FRANK NICHOLAS EGERTON  
*Assistant Professor*

EDWARD K. KRAYBILL  
*Assistant Professor*

CHARLES ROWE VAIL  
*Assistant Professor*

DARRELL MONROE HEDGECOCK  
*Instructor*

MCRÆE JARRETT  
*Instructor*

JAMES L. JENKINS  
*Instructor*

THE field of electrical engineering enters into every form of industry and public service where power is utilized, intelligence is transmitted and precise control is exercised over physical, chemical, or mechanical operations. The field of electrical engineering includes the generation, transmission, distribution, and utilization of electric power; communications, embracing telegraphy, telephony, radio, television, and radar; illumination; electrical transportation; and industrial processes and their control. In any one of these varied fields the electrical engineer may engage in work which ranges from highly technical and specialized research and design to manufacturing, maintenance, sales, and administration. As a result of these broad professional demands, the curriculum in electrical engineering has been designed to provide a solid foundation of basic science and fundamental training in the field of electricity, as well as to provide the introduction to humanistic studies which is required of all engineering students at Duke University.

The laboratory facilities of the Department of Electrical Engineering are distributed among various specialized rooms of the electrical engineering wing of the Engineering Building. These facilities are described below.

## THE ELECTRIC CIRCUITS LABORATORY

This laboratory is equipped with all necessary instruments and devices for carrying out experiments on direct-current and power-frequency alternating-current electric circuits and magnetic circuits. Oscillographs are provided for viewing and photographing both steady-

state sinusoidal and non-sinusoidal waves and transients. A harmonic generator permits the synthesis of non-sinusoidal waves in both single-phase and polyphase circuits.

### THE ELECTRICAL MEASUREMENTS LABORATORY

Facilities are provided in this laboratory for studying the principles and techniques of measuring electrical quantities throughout the entire frequency spectrum, from direct current and power frequencies through audio and radio frequencies. Instruments of both the indicating and recording types, d-c and a-c bridges, and associated apparatus are included.

### THE ELECTRONICS LABORATORY

The equipment of this laboratory makes possible studies of the physical behavior of high-vacuum and gas-filled electronic tubes and their associated circuits. Included are power-supply units, vacuum-tube voltmeters, oscillators, amplifiers, sweep-circuit generators, cathode-ray oscilloscopes, and a wide variety of electronic tubes.

### THE ELECTRIC MACHINERY LABORATORY

The electric machinery laboratory contains a wide variety of direct-current and single-phase and polyphase alternating-current electric machines, and associated apparatus for loading and testing these machines. Equipment includes a number of a-c to d-c and d-c to d-c motor-generator sets, a sine-wave generator, a synchronous converter, an ignition rectifier, a phase-displacement dynamometer, numerous constant-potential transformers, a constant-current transformer, a high-current testing transformer, induction regulators, a variety of representative d-c and a-c motors and generators, a large selection of fractional-horsepower motors, numerous loading devices, oscillographs, and complete stock of other indicating, recording, and graphic measuring instruments.

### THE COMMUNICATIONS LABORATORY

Complete equipment for the performance of experiments and for all but the most precise measurements in the audio and radio-frequency ranges is provided in this laboratory. Typical of the experiments performed by students with this equipment are: harmonic generation and wave analysis, circuit elements at audio and radio frequencies, square-wave testing, transmission characteristics of an artificial telephone line, impedance matching at audio and radio frequencies, modulation systems, detectors, generation and amplification of audio and radio frequencies, frequency measurements, field intensity measurements, and antenna radiation patterns.

### THE ULTRA-HIGH FREQUENCY LABORATORY

This laboratory is equipped to study the action of circuits and systems in the frequency range from 100 to 5,000 megacycles. Typical experiments are performed in the study of resonant lines, stub-matching sections, wave guides, resonant cavities, klystrons, magnetrons, horn radiators, parabolic reflectors, etc.

### THE ANECHOIC LABORATORY

As the name implies, the anechoic laboratory is a non-echoing or sound-proof room in which experiments and measurements can be performed on microphones, loudspeakers, and associated acoustical devices. A Western Electric sound level meter makes possible the measurement of the reverberation characteristics of rooms and the absorbing qualities of various materials. At present the experiments with acoustical systems are performed in conjunction with the communications laboratory course. The facilities for a more complete treatment of acoustics are available when the demand arises.

### THE INDUSTRIAL CONTROL LABORATORY

The industrial control laboratory contains typical electromagnetic and electronic industrial control apparatus, and associated testing equipment. Included are a thyatron-controlled resistance welder, industrial X-ray equipment, an electrostatic air cleaner, a general-purpose timer, a light-sensitive photo-troller, an automatic d-c motor speed regulator, an electronic adjustable-speed drive, a high-frequency industrial electronic heating unit, and a variety of servo-mechanism system components.

### THE HIGH-VOLTAGE LABORATORY

Housed in a special room, this laboratory contains equipment for 60-cycle testing up to 100,000 volts, and a surge ("artificial lightning") generator for impulse testing up to 500,000 volts. Auxiliary equipment provides for the control and measurement of the observed phenomena.

### THE STANDARDIZING LABORATORY

This room is provided with standard instruments for the purpose of checking and calibrating instruments used in the other laboratories. Standard cells, potentiometers, voltmeters, ammeters, wattmeters, watt-hour meters, shunts, bridges, and equipment for obtaining standard time and frequency from U. S. Bureau of Standards signals are included.

### AMATEUR RADIO STATION W4AHY

The Engineers' Radio Association is licensed by the Federal Communications Commission to operate and maintain amateur radio sta-



tion W4AHY. The station is equipped with a 125-watt 80-meter phone and C. W. transmitter, a 150-watt 20-meter phone and C. W. transmitter, a Collins 30FXB 100-watt 10-meter phone transmitter, Hammarlund Pro and HQ129 receivers, and associated testing and operating equipment. The facilities of the station are used by licensed students to gain practical experience in short wave radio and to communicate with other amateur radio operators the world over.

### THE PHOTOGRAPHIC DARK ROOM

Adjoining the industrial control laboratory is a photographic dark room maintained by the Department of Electrical Engineering to meet its specialized needs.

### THE COMPUTATION AND BRIEFING ROOMS

On each floor of the electrical engineering wing adjacent to the laboratories, there is a laboratory computation and briefing room.

## *Program of Studies for the Degree of Bachelor of Science in Electrical Engineering*

### *Freshman Year*

FIRST SEMESTER			S.H.	SECOND SEMESTER			S.H.
Math 5	College Algebra	.....	3	Math 50	Analytic Geometry	.....	3
Math 6	Trigonometry	.....	3	Math 51	Calculus I	.....	3
Chem 1	Chemistry	.....	4	Chem 2	Chemistry	.....	4
Engl 1	English Composition	.....	3	Engl 2	English Composition	.....	3
Hist E1	History	.....	3	Hist E2	History	.....	3
GE 1	Drawing	.....	2	GE 2	Descriptive Geometry	.....	2
	Physical Education	.....	1		Physical Education	.....	1
			19				19

For Air Force ROTC students AS 11 (3 s.h.) is substituted for Hist E1 and AS 12 (3 s.h.) is substituted for Hist E2 above.

For Naval ROTC students NS 101 (3 s.h.) is substituted for Hist E1 and NS 102 (3 s.h.) is substituted for Hist E2 above.

### *Sophomore Year*

FIRST SEMESTER			S.H.	SECOND SEMESTER			S.H.
Math 52	Calculus II	.....	3	Math 53	Calculus III	.....	3
Phys 51	Physics	.....	5	Phys 52	Physics	.....	5
Econ 51	Economics	.....	3	Econ 52	Economics	.....	3
GE 57	Statics	.....	3	ME 52	Kinetics—Mechanism	.....	4
EE 51	Survey of Electrical			EE 52	Fields	.....	3
	Engineering	.....	1		Physical Education	.....	1
Engl 93	Advanced Composition	...	3				19
	Physical Education	.....	1				
			19				

For Air Force ROTC students AS 61 (3 s.h.) and AS 62 (3 s.h.) are substituted for Econ 51-52 above.

For Naval ROTC students NS 201 (3 s.h.) and NS 202 (3 s.h.) are substituted for Econ 51-52 above.



*Junior Year*

FIRST SEMESTER				SECOND SEMESTER			
			S.H.				S.H.
EE	101	Circuits	3	EE	102	Circuits	3
EE	107	Circuits Laboratory	1	EE	108	Circuits Laboratory	1
EE	105	Measurements	4	EE	106	Electronics	4
Math	131	Differential Equations	3	EE	148	D-C Machinery	3
ME	103	Heat Power	3	ME	104	Heat Power	3
ME	115	Mech. Eng. Laboratory	1	ME	116	Mech. Eng. Laboratory	1
GE	128	Hydraulics	3	Engl	151	Public Speaking	3
			18				18

For Air Force ROTC students AS 111 (4 s.h.) and AS 112 (4 s.h.) are substituted for GE 128 and Engl 151 above.

For Naval ROTC students NS 301 (3 s.h.) and NS 302 (3 s.h.) are substituted for GE 128 and Engl 151 above.

*Senior Year*

FIRST SEMESTER				SECOND SEMESTER			
			S.H.				S.H.
EE	257	A-C Machinery	3	EE	258	A-C Machinery	3
EE	163	Machinery Laboratory	1	EE	164	Machinery Laboratory	1
EE	261	Communications	4	EE	262	Communications	4
EE	165	Seminar	1	EE	166	Seminar	1
EE	159	Transmission	3	GE	107	Strength of Materials	3
EE		Elective	3	GE	109	Materials Laboratory	1
		Elective (Non-Technical)	3	EE		Elective	2
			18			Elective (Non-Technical)	3
							18

For Air Force ROTC students AS 211 (1 s.h.) is added to the first semester program and AS 212 (1 s.h.) is added to the second semester program above.

For Naval ROTC students who are candidates for a Navy commission NS 401E (1 s.h.) is added to the program of one of the two semesters, and GE 128 (3 s.h.) and Engl 151 (3 s.h.) are substituted for the two non-technical electives above.

For Naval ROTC students who are candidates for a Marine Corps commission NS 401M (3 s.h.) and NS 402M (3 s.h.) are substituted for the two non-technical electives above.

*Courses of Instruction*

51. SURVEY OF ELECTRICAL ENGINEERING.—A course designed to give the student a general survey of the engineering profession, to define the scope of activities of the electrical engineer, and to provide an introduction to engineering problems. One two-hour computation. 1 s.h. ASSISTANT PROFESSOR KRAYBILL

52. ELECTRIC AND MAGNETIC FIELDS.—An introductory course covering a mathematical and physical analysis of energy relations in electrostatic and magnetostatic fields; resistance, capacitance and inductance of systems of conductors; systems of electric and magnetic units. Two recitations and one two-hour computation. Prerequisites: EE 51, Mathematics 52. Physics 52, Mathematics 53 concurrently. 3 s.h. ASSISTANT PROFESSOR VAIL

101-102. CIRCUITS IN ELECTRICAL ENGINEERING.—A two-semester course covering methods of electric and magnetic circuit analysis applicable in all branches of electrical engineering; alternating and direct currents; the algebra of vectors

and complex quantities; networks; nonsinusoidal waves; coupled circuits; transients; polyphase circuits; symmetrical components. Prerequisite: EE 52. EE 107-108 and Mathematics 131 concurrently. 6 s.h. ASSISTANT PROFESSOR VAIL

105. ELECTRICAL MEASUREMENTS.—A course covering direct-current and low-frequency measurements; the theory, calibration, and use of laboratory standards, potentiometers, instrument transformers, and power and energy measuring apparatus; and audio-frequency measurements of impedance, current and potential. Three class sessions and one three-hour laboratory. Prerequisite: EE 52. Mathematics 131 and EE 101 concurrently. 4 s.h. MR. HEDGECOCK

106. ELECTRON TUBES AND CIRCUITS.—A course covering electronic emission, static and dynamic tube characteristics, rectification, glow-discharge tubes, amplifiers, oscillators, and other typical circuits. Three class sessions and one three-hour laboratory. Prerequisites: EE 101, EE 105, EE 107. EE 102 and EE 108 concurrently. 4 s.h. MR. HEDGECOCK

107-108. CIRCUITS LABORATORY.—A two-semester course designed to provide instruction in electrical laboratory techniques and in the preparation of engineering reports, and to provide experimental verification of the theory of course EE 101-102, with which it should be taken concurrently. One three-hour laboratory. 2 s.h. ASSISTANT PROFESSORS VAIL AND KRAYBILL

123. PRINCIPLES OF ELECTRIC CIRCUITS.—A course designed especially for students in other branches of engineering, covering the fundamental electric units and both alternating and direct-current circuits. Three class sessions and one three-hour laboratory. Prerequisites: Mathematics 52 and Physics 52. 4 s.h. ASSISTANT PROFESSORS KRAYBILL, EGERTON, AND MR. JARRETT

124. PRINCIPLES OF ELECTRIC MACHINERY.—A course designed especially for students in other branches of engineering, covering the application of the principles of course EE 123 to alternating and direct-current machinery and associated apparatus. Three class sessions and one three-hour laboratory. Prerequisite: EE 123. 4 s.h. ASSISTANT PROFESSORS KRAYBILL, EGERTON, AND MR. JARRETT

148. DIRECT-CURRENT MACHINERY.—A study of the principles which underlie the design and operation of all types of direct-current generators, motors, and associated apparatus. Prerequisites: EE 101 and EE 107. EE 102 and EE 108 concurrently. 3 s.h. ASSOCIATE PROFESSOR MEIER AND MR. JARRETT

158. \*ELECTRIC-POWER SYSTEMS.—A course providing a brief survey of the electric-power industry followed by a consideration of the economic and engineering features of power plant location and design, and by a study of the apparatus utilized in the generation, transmission and distribution of electric power. Prerequisites: EE 148 and ME 104, and permission of instructor. EE 257-258 concurrently. Elective for electrical majors. 3 s.h. PROFESSOR SEELEY

159. TRANSMISSION.—A development of the theory underlying the transmission of electric energy over conductors at both power and communication frequencies. Two class sessions and one two-hour computation. Prerequisites: EE 101-102, EE 105, EE 106, Mathematics 131. 3 s.h. PROFESSOR SEELEY

161. \*HIGH-VOLTAGE ENGINEERING.—An introductory study of the high-voltage phenomena and their engineering applications: behavior of gaps and insulators upon application of power-frequency and impulse voltages; corona; properties of insulating materials; high-voltage measurements; elements of high-voltage design. Two class sessions and one three-hour laboratory. Prerequisites: EE 101-102, EE 105, 106, and permission of instructor. Elective for electrical majors. 3 s.h. ASSISTANT PROFESSOR VAIL

163-164. ELECTRIC MACHINERY LABORATORY.—A study of the technique of testing electric machines and a thorough analysis of their performance. Concurrent with EE 257-258. One three-hour session, for two semesters. 2 s.h. ASSOCIATE PROFESSOR MEIER AND MR. JARRETT

\* Offered only upon sufficient demand; enrollment limited.

165-166. **ELECTRICAL ENGINEERING SEMINAR.**—A course in which seniors are required to present oral reports and dissertations on material appearing in current engineering literature. Juniors may participate, but without credit. 2 s.h.  
STAFF

171. **\*FUNDAMENTALS OF ILLUMINATION.**—A course designed to familiarize the student with some of the factors that influence seeing; to provide a working knowledge of lighting language, sources, and measuring techniques; and to acquaint the student with the basic factors involved in recommended lighting practice. Two class sessions and one two-hour computation. Prerequisites: EE 101-102 or EE 123, and permission of instructor. Elective. 3 s.h.

ASSISTANT PROFESSOR KRAYBILL

173-174. **\*PROJECTS IN ELECTRICAL ENGINEERING.**—A course which may be undertaken only by seniors who show special aptitude, or who may have had previous experience directly related to the proposed project. The consent of the Chairman of the Department must be obtained before registering. Elective for electrical majors. 3-6 s.h.  
STAFF

180. **\*RADIO-FREQUENCY TRANSMISSION AND PROPAGATION.**—Theory and application of transmission and propagation at high and ultra-high frequencies; impedance-matching elements; coupling devices; cavity resonators; wave guides and antennas. Two class sessions and one three-hour laboratory. Prerequisites: EE 159, EE 261, and permission of instructor. EE 262 concurrently. Elective for electrical majors. 3 s.h.  
MR. JENKINS

197. **\*INDUSTRIAL APPLICATIONS OF ELECTRICAL EQUIPMENT.**—A course of lectures, demonstrations and recitations designed especially for students in other branches of engineering, dealing with the basic principles of utilization of a wide variety of electrical equipment in industrial practice. Emphasis is on industrial control, motor and generator applications, and electronic devices and applications. Prerequisite: EE 124, and permission of instructor. Elective for non-electricals. 3 s.h.  
ASSOCIATE PROFESSOR MEIER

198. **\*INDUSTRIAL CONTROL.**—This course, open only to students majoring in electrical engineering, consists of a study of the electromagnetic and electronic control of electric motors in industrial applications. Prerequisites: EE 101-102, EE 106, EE 148, EE 257, and permission of instructor. EE 258 concurrently. Elective for electrical majors. 3 s.h.  
ASSOCIATE PROFESSOR MEIER

257-258. **ALTERNATING-CURRENT MACHINERY.**—A two-semester course dealing with the theory underlying the design, construction, and operation of synchronous generators, transformers, polyphase induction motors, synchronous motors, single-phase motors of all types, and converters and rectifiers. Prerequisites: EE 101-102 and EE 148. 6 s.h.  
ASSOCIATE PROFESSOR MEIER AND MR. JARRETT

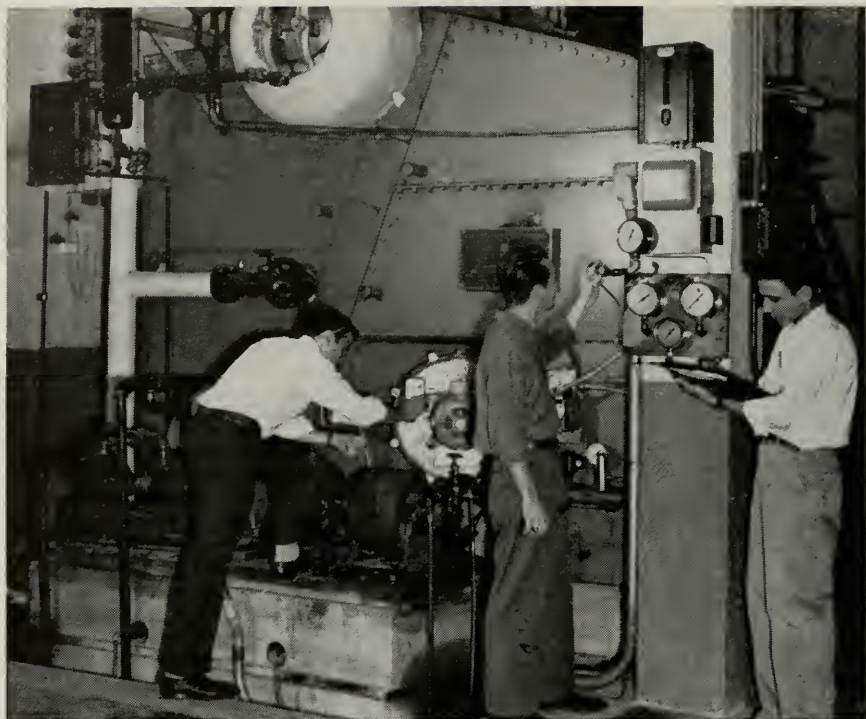
261. **COMMUNICATION ENGINEERING.**—An advanced course dealing with the principles underlying radio communication with special emphasis on the development of methods and procedures for the mathematical analysis of electron tube circuits. Included are vacuum tube amplifiers, oscillators, special electron tube circuits, and introduction to pole and zero studies of response and impedance. Three class sessions and one three-hour laboratory. Prerequisites: EE 101-102, EE 105, EE 106, and Mathematics 131. 4 s.h.  
MR. JENKINS

262. **COMMUNICATION ENGINEERING.**—The second half of the course EE 261. Included are rectifiers and filters, amplitude and frequency modulation, demodulation, microwave tubes, propagation of radio waves, antennas. Three class sessions and one three-hour laboratory. Prerequisite: EE 261. 4 s.h. MR. JENKINS

263-264. **\*OPERATIONAL CIRCUIT ANALYSIS.**—An advanced course covering the mathematical analysis of certain circuits used in electrical engineering, with an introduction to the application of operational calculus to circuit analysis. Prerequisites: EE 101-102, Mathematics 131, and permission of instructor. Elective for electrical majors. 6 s.h.  
PROFESSOR SEELEY

\* Offered only upon sufficient demand; enrollment limited





# Department of Mechanical Engineering



RALPH SYDNEY WILBUR, Chairman  
*Professor*

FREDERICK JEROME REED  
*Associate Professor*

C. DARBY FULTON, JR.  
*Assistant Professor*

VAN LESLIE KENYON  
*Assistant Professor*

ERNEST ELSEVIER  
*Instructor*

RAY WALTER HOLLAND  
*Instructor*

LESLIE CLIFFORD WILBUR  
*Instructor*

DAVID RABIN  
*Visiting Instructor (Part-time)*

THE profession of mechanical engineering is founded upon the production of power from nature's resources and the application of this power to useful ends. It is a profession with many specialized fields of both theoretical and applied knowledge and techniques. Some of these fields of specialization are combustion of power production engineering, machine and machine-tool design, railway motive power engineering, automotive engineering, heating and air conditioning, refrigeration, and industrial management.

The Department makes no attempt to train specialized engineers during the four-year undergraduate course; rather, a well-balanced fundamental training with applications in the more active fields is its aim. Theoretical training in the classroom is carefully supplemented by application in the laboratory.

The equipment in the mechanical engineering laboratories has been carefully selected and grouped to yield the greatest educational benefit to the student.

## *Power Plant Laboratory*

This laboratory occupies a two-story wing off the main mechanical engineering wing of the Engineering Building. A 3200-pound per hour, automatic, oil-fired Combustion Engineering boiler, designed specifically for the needs of this laboratory, produces steam at 250 pounds pressure and a total temperature of 556° F. This steam is utilized to operate a complete experimental power plant in the same wing. The experimental power plant consists of two 25-kw Westing-

house turbogenerator units, condenser and air ejector with after-condenser, feed-water heater, pumps and accessories, and a control and instrument board. The electric energy generated operates a synchronous motor and hydraulic dynamometer. Interconnection of piping and controls, and complete instrumentation, enable the simulation and study of any type of power plant in common use.

### *Mechanical Laboratory*

**STEAM EQUIPMENT:** Adjacent to the boiler room are a horizontal Troy engine with shaft cut-off governor, a Troy vertical throttling governing engine, a Sturtevant steam turbine, a condenser and air ejector with after-condenser and accessories, and a boiler feed pump. These may be tested and studied individually or in combinations. Additional equipment for studying flow and quality of steam, an injector, and traps are located in this area.

**INTERNAL COMBUSTION EQUIPMENT:** A section of the west side of the laboratory contains two automotive-type and one tractor-type gasoline engines, with dynamometers, accessories and instruments for determining their characteristics and energy balances; in addition, a small single-cylinder Diesel engine-generator unit, a 6-cylinder Diesel engine-generator unit, and a 4-cylinder gasoline engine-generator unit provide complete coverage of types for thorough study of internal combustion.

**AIR COMPRESSION:** A very complete study of air compression is afforded by the use of a Worthington 8 by 9-inch V-belt a-c motor driven water-cooled compressor and a modern Davey Air-chief V-belt variable speed d-c motor driven air-cooled compressor.

**HYDRAULIC APPARATUS:** A section of the east side and south end of the laboratory contains a Cameron centrifugal pump combined with a series of weirs and orifices, as well as a hydraulic turbine which may be equipped alternately with either a Kaplan or Francis type of wheel. This equipment offers a complete range of experiments and tests in hydraulics and fluid mechanics.

**LUBRICANTS AND FUELS TESTING LABORATORY:** In the south end of the main laboratory are five rooms completely equipped for the study of solid, liquid, and gaseous fuel analysis and calorimetry; lubricant testing; and feed-water analysis.

**INSTRUMENT ROOM:** An instrument room is provided for the storing and maintenance of instruments. Such instruments include steam and internal combustion engine indicators and reducing motions, tachometers and speed counters, planimeters, pressure gauges and gauge testers, thermometers of all types, scales of all types and small tools.



**HEATING, AIR CONDITIONING, AND REFRIGERATION:**

A standard type domestic steam generating coal-fired heating boiler and a forced hot water circulator oil-fired boiler, standard centrifugal fan testing apparatus, equipment for studying the flow of air through ducts, registers and grilles, and two five-horsepower York Freon-12 refrigerating compressors are provided for testing and study in this field.

*Materials Processing Laboratory*

**MACHINE TOOLS:** Two engine lathes, a universal milling machine, a shaper with slotter attachment, a drill press, a power grinder, and a power hack saw compose the metal-working tools. Such auxiliary attachments as are needed for general-purpose machines are provided for the above machine tools. Woodworking machines that include the lathe, band saw, circular saw and planer, and a disc sander are available for pattern and model construction.

**WELDING EQUIPMENT:** A 200-ampere electric arc welding machine and complete oxy-acetylene welding and cutting equipment are provided for demonstration of these methods of construction and fabrication.

**CASTING EQUIPMENT:** A gas-fired melting furnace and sufficient molding equipment are available for the production of small castings on a demonstration basis.

**METALLOGRAPHIC AND HEAT TREATING EQUIPMENT:** Polishing equipment and a microscope are available for the preparation and examination of metal specimens. Heat treatments may be carried out with the use of a gas-fired heat-treating furnace.

*Program of Studies for the Degree of Bachelor  
of Science in Mechanical Engineering*

*Freshman Year*

FIRST SEMESTER				SECOND SEMESTER			
			S.H.				S.H.
Math	5	College Algebra	3	Math	50	Analytic Geometry	3
Math	6	Trigonometry	3	Math	51	Calculus I	3
Chem	1	Chemistry	4	Chem	2	Chemistry	4
Engl	1	English Composition	3	Engl	2	English Composition	3
Hist	E1	History	3	Hist	E2	History	3
GE	1	Drawing	2	GE	2	Descriptive Geometry	2
		Physical Education	1			Physical Education	1
			19				19

For Air Force ROTC students AS 11 (3 s.h.) is substituted for Hist E1 and AS 12 (3 s.h.) is substituted for Hist E2 above.

For Naval ROTC students NS 101 (3 s.h.) is substituted for Hist E1 and NS 102 (3 s.h.) is substituted for Hist E2 above.

*Sophomore Year*

FIRST SEMESTER			SECOND SEMESTER		
		S.H.			S.H.
Math 52	Calculus II	3	Math 53	Calculus III	3
Phys 51	Physics	5	Phys 52	Physics	5
Econ 51	Economics	3	Econ 52	Economics	3
GE 57	Statics	3	ME 52	Kinetics-Mechanism	4
ME 55	Steam Engineering	2	Engl 93	Advanced Composition	3
ME 51	Constructive Processes	3		Physical Education	1
	Physical Education	1			
		20			19

For Air Force ROTC students AS 61 (3 s.h.) and AS 62 (3 s.h.) are substituted for Econ 51-52 above.

For Naval ROTC students NS 201 (3 s.h.) and NS 202 (3 s.h.) are substituted for Econ 51-52 above.

*Junior Year*

FIRST SEMESTER			SECOND SEMESTER		
		S.H.			S.H.
ME 101	Thermodynamics	3	ME 102	Thermodynamics	3
ME 113	Mech. Eng. Laboratory	1	ME 114	Mech. Eng. Laboratory	2
ME 105	Fluid Mechanics	3	ME 108	Aeronautics	3
GE 107	Strength of Materials	3	ME 106	Heat Transfer	3
GE 109	Materials Laboratory	1	ME 150	Machine Design	3
EE 123	Electric Circuits	4	EE 124	Electric Machinery	4
Engl 151	Public Speaking	3			
		18			18

For Air Force ROTC students AS 111 (4 s.h.) and AS 112 (4 s.h.) are substituted for Engl 151 and ME 108 above.

For Naval ROTC students NS 301 (3 s.h.) and NS 302 (3 s.h.) are substituted for Engl 151 and ME 108 above.

*Senior Year*

FIRST SEMESTER			SECOND SEMESTER		
		S.H.			S.H.
ME 151	Machine Design	4	ME 158	Industrial Engineering	3
ME 155	Internal Combustion Engines	3	ME 162	Power Plants	3
ME 153	Heating—Air Conditioning	3	ME 154	Refrigeration	3
ME 159	Mech. Eng. Laboratory	2	ME 160	Mech. Eng. Laboratory	2
ME	Engineering Elective	3	ME	Engineering Elective	3
	Elective (Non-Technical)	3		Elective (Non-Technical)	3
		18			17

For Air Force ROTC students AS 211 (1 s.h.) is added to the first semester program and AS 212 (1 s.h.) is added to the second semester program above.

For Naval ROTC students who are candidates for a Navy commission NS 401E (1 s.h.) is added to the program of one of the two semesters, and Econ 51-52 (6 s.h.) is substituted for the two non-technical electives above.

For Naval ROTC students who are candidates for a Marine Corps commission NS 401M (3 s.h.) and NS 402M (3 s.h.) are substituted for the two non-technical electives above.

## *Courses of Instruction*

51. CONSTRUCTIVE PROCESSES.—Recitation course covering fundamentals of metallurgy and general processes of casting, forging, and machining. Demonstration or observation of basic machining operations is arranged when possible. Prerequisite: Chemistry 2. 3 s.h. MESSRS. HOLLAND AND L. C. WILBUR

52. KINETICS-MECHANISM.—Motions of particles. Applications of Newton's laws of motion to motions of rigid bodies. Work, energy, impulse, and momentum. Linkages, cams, gears, trains of mechanism. Three recitations, three laboratory hours. Prerequisites: GE 2, GE 57, Mathematics 52. 4 s.h.

ASSISTANT PROFESSOR FULTON, MESSRS. HOLLAND AND L. C. WILBUR

55. STEAM ENGINEERING.—Elementary principles of boilers, engines, turbines, and auxiliaries; properties of steam; fuels and combustion. Prerequisite: Chemistry 2. 2 s.h. PROFESSOR R. S. WILBUR, ASSISTANT PROFESSOR KENYON

101-102. ENGINEERING THERMODYNAMICS.—A study of thermodynamic properties and processes of gases, vapor and gas-vapor mixtures; cycles; efficiencies and performance of steam power plant equipment. Three recitations. Prerequisites: Mathematics 52, Physics 52, ME 55. 6 s.h.

PROFESSOR R. S. WILBUR, ASSISTANT PROFESSORS FULTON AND KENYON

103-104. HEAT POWER ENGINEERING.—A short course in engineering thermodynamics with applications to power plant design, for CE and EE students only. Three recitations. Prerequisites: Chemistry 2, Mathematics 52, Physics 52. 6 s.h. ASSOCIATE PROFESSOR REED, ASSISTANT PROFESSOR KENYON, AND MR. L. C. WILBUR

105. FLUID MECHANICS.—Fluid statics; kinematics of fluid flow; application of fluid dynamics theory to flow through orifices, weirs, and pipes; general principles of centrifugal pumps and turbines. Prerequisites: ME 52, Mathematics 52, Physics 52. 3 s.h. ASSISTANT PROFESSOR KENYON AND MR. L. C. WILBUR

106. HEAT TRANSFER.—Conduction, radiation and convection; heat transfer to boiling liquids or condensing vapors; over-all transfer of heat, steady state or variable flow. Applications to heat power, heating and air conditioning, and refrigeration. Prerequisites: ME 101 or 103, ME 105 or GE 128. Mathematics 52. ME 102 or 104 concurrently. May be elected by limited number of CE and EE students. 3 s.h. ASSOCIATE PROFESSOR REED AND ASSISTANT PROFESSOR FULTON

108. AERONAUTICS.—A general course applying fluid mechanics principles to airfoils, propellers, and the complete airplane. Prerequisite: ME 105. 3 s.h.

MR. ELSEVIER

113-114. JUNIOR MECHANICAL ENGINEERING LABORATORY.—Open only to mechanical engineering students. First semester, three laboratory hours, devoted to experiments and reports in hydraulics, flue gas analyses, calorific value of fuels. Second semester, six laboratory hours, devoted to experiments and reports related to thermodynamics, such as boiler inspection, air compression, injectors, steam and fuel calorimetry. Prerequisite: ME 55. ME 101-102 concurrently. 3 s.h. PROFESSOR R. S. WILBUR AND STAFF

115-116. JUNIOR MECHANICAL ENGINEERING LABORATORY.—Open only to electrical and civil engineering students. Experiments and reports on measuring instruments and apparatus, flow of air, steam and water, economy of boilers, steam and internal combustion engines. Three laboratory hours. ME 103-104 concurrently. 2 s.h. PROFESSOR R. S. WILBUR AND STAFF

150-151. MACHINE DESIGN.—Application of principles of mechanics, strength of materials, constructive processes and engineering drawing to the design of bolted, riveted and welded connections, pressure vessels and machine elements, followed by design of at least one complete machine. ME 150 has two recitations and three laboratory hours; ME 151 has two recitations and six laboratory hours. Prerequisites: GE 2, ME 52, GE 57, ME 51, GE 107. 7 s.h.

MESSRS. HOLLAND AND L. C. WILBUR

153-154. **HEATING, AIR CONDITIONING AND REFRIGERATION.**—Determinations of heat losses and gains; design of steam, hot water and warm air heating and air conditioning systems; panel heating. Fundamentals of refrigeration theory and design. Applications of refrigeration to summer and year round air conditioning; commercial and industrial applications of refrigeration. Prerequisites: ME 102, ME 105, ME 106. ME 159-160 concurrently. Two recitations, three laboratory hours. 6 s.h.  
ASSOCIATE PROFESSOR REED AND MR. ELSEVIER

155. **INTERNAL COMBUSTION ENGINES.**—Principal cycles; fuels and fuel mixtures; effect of real mixtures on theoretical cycles; combustion; carburetion and fuel injection. Thermodynamic analysis of engine performance. Modern development in the internal combustion engine. Three recitations. Prerequisite: ME 101-102. 3 s.h.  
ASSISTANT PROFESSOR FULTON AND MR. ELSEVIER

157. **\*CENTRIFUGAL PUMPS AND BLOWERS.**—A study of the basic principles of design, construction and application of centrifugal pumps and blowers. May be elected by a limited number of mechanical engineering seniors with consent of Chairman of Department. Prerequisite: ME 105. 3 s.h.  
ASSISTANT PROFESSOR FULTON

158. **INDUSTRIAL ENGINEERING.**—A study of the industrial growth and present tendencies of productive industries as concerns the engineer. Specific topics treated are: plant location, organization, production and cost controls, wage payment, etc. Seniors only. Three recitations. 3 s.h.  
ASSISTANT PROFESSOR LEWIS AND MR. HOLLAND

159. **SENIOR MECHANICAL ENGINEERING LABORATORY.**—Tests and reports on performance and economy of internal combustion engines, steam engines and turbines; heat transfer, radiator tests, and energy balances. Required of all seniors in mechanical engineering. Six laboratory hours. Prerequisite: ME 114. ME 153 concurrently. 2 s.h.  
PROFESSOR R. S. WILBUR AND STAFF

160. **SENIOR MECHANICAL ENGINEERING LABORATORY.**—Required of all seniors in mechanical engineering. Tests and reports on boiler, engine, turbine, condenser and accessories; heat transfer; refrigeration equipment. Six laboratory hours. Prerequisite: ME 159. ME 154 and ME 162 concurrently. 2 s.h.  
PROFESSOR R. S. WILBUR AND STAFF

162. **POWER PLANT CALCULATIONS.**—Study of economic and engineering factors in developing steam power plants. Consideration of the performance of boilers, prime movers, condensers and various auxiliaries in various groupings as they affect the plant heat balance. May be elected by limited number of CE or EE students. Three recitations. Prerequisite: ME 101-102 or ME 103-104. 3 s.h.  
PROFESSOR R. S. WILBUR

164. **\*ENGINEERING ANALYSIS.**—A study of a series of engineering problems with particular reference to mathematical and graphical methods of solution and engineering interpretation of results. 3 s.h.  
MR. L. C. WILBUR

166. **\*AIR CONDITIONING DESIGN.**—Analysis of air-conditioning requirements, summer and winter, commercial and industrial. Design of systems and units, and selection of equipment. Open to seniors who have completed ME 153. 3 s.h.  
ASSOCIATE PROFESSOR REED

197-198. **PROJECTS IN MECHANICAL ENGINEERING.**—This course may be assigned by the Chairman of the Department to certain seniors who express a desire for such work and who have shown aptitude for research in one distinct field of mechanical engineering. Elective credit for either semester. 3-6 s.h.  
PROFESSOR R. S. WILBUR AND STAFF

\* Offered only upon sufficient demand; enrollment limited.







# BULLETIN OF DUKE UNIVERSITY



## The Summer Session 1951

First Term: June 12 to July 21

Second Term: July 21 to August 31

# Annual Bulletins

For GENERAL BULLETIN of Duke University, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF UNDERGRADUATE INSTRUCTION, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF THE COLLEGE OF ENGINEERING, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES, apply to *The Dean of the Graduate School*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF LAW, apply to *The Dean of the School of Law*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF MEDICINE, apply to *The Dean of the School of Medicine*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF NURSING, apply to *The Dean of the School of Nursing*, Duke University, Durham, N. C.

For BULLETIN OF THE DIVINITY SCHOOL, apply to *The Dean of the Divinity School*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF FORESTRY, apply to *The Dean of the School of Forestry*, Duke University, Durham, N. C.

For BULLETIN OF THE SUMMER SESSION, apply to *The Director of the Summer Session*, Duke University, Durham, N. C.

Published by Duke University monthly except in July, August, September, and December. Entered as second-class matter March 25, 1929, at the Post Office of Durham, North Carolina, under the Act of August 24, 1912.

BULLETIN  
OF  
DUKE UNIVERSITY



*The Summer Session 1951*

ANNOUNCEMENTS

First Term: June 12 to July 21

Second Term: July 21 to August 31

DURHAM, NORTH CAROLINA  
1951

July 23-27, Monday-Friday

The Science Teachers Laboratory Conference.

July 27, Friday

Final date for filing with the Dean of the Graduate School statement of intention to complete Master's degree requirements during the Second Term, and for filing title of Master's thesis.

August 2-4, Thursday-Saturday

Conference of the North Carolina English Teachers Association.

August 7-17, Tuesday-Friday

The Duke Institute for Teachers of Mathematics.

August 18, Saturday

Final examinations in all 4-week courses of the Second Term in Chemistry, Geology, Physics, and Zoology.

August 25, Saturday

Final examination in Physics S52.

August 30-31, Thursday-Friday

Final examinations in all 6-week courses of the Second Term.

September 1-12, Saturday-Wednesday

Special course in Solid Geometry.

## Table of Contents

	PAGE
Administrative Officers .....	5
The Summer Session Faculty .....	6
Functions of the Summer Session.....	12
Admission .....	14
Fees and Living Expenses.....	17
Student Aid .....	20
Registration .....	22
Resources of the University.....	24
Special Conferences and Institutes.....	30
The Graduate School of Arts and Sciences.....	36
Undergraduate Study .....	43
Courses of Instruction .....	44



# Administrative Officers of the Summer Session

ARTHUR HOLLIS EDENS, B.Ph., A.M., M.P.A., LL.D.

*President of Duke University*

PAUL MAGNUS GROSS, B.S., A.M., Ph.D.

*Vice-President in the Educational Division*

CHARLES EDWARD JORDAN, A.B., LL.D.

*Vice-President in the Division of Public Relations and  
Secretary of the University*

HERBERT JAMES HERRING, A.B., A.M., LL.D.

*Vice-President in the Division of Student Life and  
Dean of Trinity College*

ALFRED SMITH BROWER, A.B.

*Business Manager and Comptroller*

ALAN KREBS MANCHESTER, A.B., A.M., Ph.D.

*Dean of Undergraduate Studies*

PAUL HIBBERT CLYDE, A.B., A.M., Ph.D.

*Director of the Summer Session*

WILLIAM THOMAS LAPRADE, A.B., Ph.D.

*Member of the University Committee on the Summer Session*

JOSEPH CLARK ROBERT, A.B., A.M., Ph.D.

*Associate Dean of the Graduate School*

JOHN WINDER CARR, JR., A.B., A.M., Ph.D.

*Assistant Director of the Summer Session*

MARY GRACE WILSON, A.B., A.M.

*Dean of Residence, the Woman's College*

THELMA ALBRIGHT, A.B., A.M.

*Social Director, First Term*

EVELYN BARNES, B.S.

*Social Director, Second Term*

# The Summer Session Faculty

ADAMS, DONALD KEITH, A.B., M.A., Ph.D. <i>Professor of Psychology</i>	202 Bivins
ALLENSON, DOUGLAS R., A.B. <i>Instructor in Chemistry</i>	307 Chemistry
AMOR Y VALQUEZ, JOSE, DR. EN LEYES <i>Visiting Instructor in Spanish</i> <i>Brown University</i>	Carr
ANDERSON, LEWIS EDWARD, B.S., A.M., Ph.D. <i>Associate Professor of Botany</i>	303 Biology
ARCHIE, WILLIAM COUNCILL, A.B., A.M., Ph.D. <i>Assistant Professor of Romance Languages</i>	102 Administration
AYCOCK, THOMAS MALCOLM, B.S., M.A. <i>Professor of Physical Education</i>	107 Old Gym (W)
BAUM, PAULL FRANKLIN, A.B., A.M., Ph.D. <i>Professor of English</i>	402 Library
BEACH, WALDO, A.B., B.D., Ph.D. <i>Associate Professor of Christian Ethics</i>	308 Divinity
BERRY, EDWARD WILLARD, A.B., Ph.D. <i>Professor of Geology</i>	016 Science (E)
BLACK, MARTIN LEE, JR., A.B., M.B.A., C.P.A. <i>Professor of Accounting</i>	115 Administration
BLACKBURN, WILLIAM MAXWELL, A.B., M.A., Ph.D. <i>Associate Professor of English</i>	201B E. Duke (E)
BLOMQUIST, HUGO LEANDER, B.S., Ph.D. <i>Professor of Botany</i>	203 Biology
BOLMEIER, EDWARD CLAUDE, B.S., A.M., Ph.D. <i>Associate Professor of Education</i>	1C1 W. Duke (E)
BOOKHOUT, CAZLYN GREEN, A.B., A.M., Ph.D. <i>Associate Professor of Zoology</i>	333 Biology
BOWMAN, FRANCIS EZRA, A.B., M.A., Ph.D. <i>Associate Professor of English</i>	2G W. Duke (E)
BRADSHIER, CHARLES KILGO, A.B., M.A., Ph.D. <i>Associate Professor of Chemistry</i>	216 Chemistry
BRASWELL, WILLIAM, M.A., Ph.D. <i>Visiting Professor of English,</i> <i>Purdue University</i>	2G W. Duke (E)
BROWN, CHANDLER WILCOX, B.S. in C.E. <i>Instructor in Civil Engineering</i>	211 Engineering
CANNON, JAMES, III, A.B., A.M., Th.B., Th.M., D.D. <i>Ivey Professor of History of Religion and Missions</i>	104 Divinity
CARLITZ, LEONARD, A.B., A.M., Ph.D. <i>Professor of Mathematics</i>	223 Physics
CARPENTER, DAVID WILLIAMS, A.B., A.M., Ph.D. <i>Professor of Physics</i>	109 Physics

CARR, JOHN WINDER, JR., A.B., A.M., Ph.D. <i>Professor of Education</i>	104 Page
CARROLL, EBER MALCOLM, A.B., A.M., Ph.D. <i>Professor of History</i>	406 Library Tower
CHILDS, BENJAMIN GUY, B.A., M.A. <i>Professor of Education</i>	1B W. Duke (E)
COILE, THEODORE STANLEY, B.S.F., M.F., Ph.D. <i>Professor of Forest Soils</i>	014 Biology
COOK, DANIEL, A.B., M.A. <i>Instructor in English</i>	207 Gray
CORDLE, THOMAS HOWARD, A.B., A.M. <i>Instructor in Romance Languages</i>	107 Gray
CRAWLEY, MILDRED, R.N., B.S. <i>Instructor in Nursing Arts</i>	1006 Hospital
DAVIES, WILLIAM DAVID, B.A., M.A., B.D., D.D. <i>Professor of Biblical Theology</i>	04 Divinity
DAVIS, GIFFORD, A.B., A.M., Ph.D. <i>Associate Professor of Romance Languages</i>	213 Carr
DICKEY, DALLAS, M.A., Ph.D. <i>Visiting Professor of English</i> <i>University of Florida</i>	2G W. Duke (E)
DICKENS, ROBERT, B.S., M.S. <i>Instructor in Economics</i>	203E Social Science
DOW, NEAL, A.B., M.A., Ph.D. <i>Assistant Professor of Romance Languages</i>	107 Gray
DRESSEL, FRANCIS GEORGE, B.S., M.S., Ph.D. <i>Associate Professor of Mathematics</i>	214 Physics
DUNHAM, BRADFORD, A.B., Ph.D. <i>Instructor in Philosophy</i>	3-1 W. Duke (E)
EASLEY, HOWARD, A.B., M.A., Ph.D. <i>Associate Professor of Education</i>	1B W. Duke (E)
ECKARDT, ARTHUR ROY, B.A., B.D., Ph.D. <i>Assistant Professor of Religion</i>	05 Gray
ELLIOTT, WILLIAM WHITFIELD, B.A., M.A., Ph.D. <i>Professor of Mathematics</i>	03 Gray
FEIN, JOHN MORTON, A.B., A.M., Ph.D. <i>Assistant Professor of Romance Languages</i>	04 Gray
GARMIEZY, NORMAN, B.A., M.A., Ph.D. <i>Assistant Professor of Psychology</i>	102 Bivins
GERGEN, JOHN JAY, A.B., A.M., Ph.D. <i>Professor of Mathematics</i>	220 Physics
GILBERT, ALLAN H., A.B., A.M., Ph.D. <i>Professor of English</i>	502 Library
GRAY, IRVING EMERY, B.S., M.S., Ph.D. <i>Professor of Zoology</i>	218 Biology
HAMILTON, WILLIAM BASKERVILLE, A.B., A.M., Ph.D. <i>Associate Professor of History</i>	2B W. Duke (E)
HANNA, FRANK A., B.A., Ph.M., Ph.D. <i>Associate Professor of Economics</i>	201-A Social Science

HART, HORNELL NORRIS, A.B., M.A., Ph.D. <i>Professor of Sociology</i>	215-D Social Science
HAUPT, GEORGE W., B.S., M.A., Ph.D. <i>Visiting Professor of Education</i> <i>Glassboro State Teachers College</i>	1C W. Duke (E)
HICKSON, ARTHUR OWEN, A.B., A.M., Ph.D. <i>Assistant Professor of Mathematics</i>	201E Gray
HIGHSMITH, JOHN HENRY, A.B., A.M., LL.D., D.Ed. <i>Visiting Professor of Education</i> <i>N. C. State Department of Public Instruction</i>	1C W. Duke (E)
HILLMAN, JAMES ELGAN, B.S., A.M., Ph.D. <i>Visiting Professor of Education</i> <i>N. C. State Department of Public Instruction</i>	1C W. Duke (E)
HOBBS, MARCUS EDWIN, A.B., A.M., Ph.D. <i>Professor of Chemistry</i>	022 Chemistry
HORN, EDWARD CHARLES, B.S., A.M., Ph.D. <i>Assistant Professor of Zoology</i>	118 Biology
HUNTER, WANDA SANBORN, MRS., A.B., M.S., Ph.D. <i>Associate Professor of Zoology</i>	201 Science (E)
HYLDBURG, CARL A., JR., A.B., LL.B. <i>Instructor in Economics</i>	203-H Social Science
INGLES, THELMA, R.N., B.A., M.A. <i>Assistant Professor of Nursing Education</i>	M112 Hospital
JOERG, FREDERICK CHARLES, B.S., M.B.A. <i>Assistant Professor of Economics</i>	110 Carr (E)
LANDON, CHARLES EARL, A.B., A.M., Ph.D. <i>Associate Professor of Economics</i>	203-C Social Science
LANNING, JOHN TATE, A.B., A.M., Ph.D. <i>Professor of History</i>	501 Library
LEMERT, BEN FRANKLIN, B.Sc. in Bus. Admin., M.A., Ph.D. <i>Associate Professor of Economic Geography</i>	206 Social Science
MCCORMIC, MARY, A.B., M.A. <i>Instructor in Health Education</i>	Gymnasium (W)
MANCHESTER, ALAN KREBS, A.B., A.M., Ph.D. <i>Professor of History</i>	106 Administration
MANN, EVERETTE JAMES, A.B., M.B.A., C.P.A. <i>Associate Professor of Economics</i>	203-I Social Science
MASSEY, LUCY, R.N., B.A., M.A. <i>Assistant Professor of Public Health Nursing</i>	02 Hospital
MATHEWSON, FRANKLIN T., A.B., M.A., Ph.D. <i>Visiting Professor of Education</i> <i>Supervisor of Audio-Visual Education,</i> <i>Public Schools, White Plains, N. Y.</i>	1C W. Duke (E)
MAXWELL, WILLIAM CARY, A.B., A.M., Ph.D. <i>Assistant Professor of German</i>	106-D Social Science
MEYER, GEORGE W., M.A., Ph.D. <i>Visiting Professor of English</i> <i>Newcomb College, Tulane University</i>	2G W. Duke (E)
MONTFORT, ROBERT JOHN, B.A. <i>Instructor in Physical Education</i>	107 Old Gym (W)

MOSEY, LOUISE, R.N., A.B., M.N. <i>Assistant Professor of Nursing Education</i>	123 Baker House
OSTERMAN, MARIE, R.N., B.S., M.A. <i>Assistant Professor of Nursing Education</i>	M112 Hospital
OSTWALT, JAY HAROLD, A.B., A.M. <i>Visiting Associate Professor of Education</i> <i>Davidson College</i>	2A W. Duke (E)
PERRY, EDMUND FRANKLIN, A.B., B.D., Ph.D. <i>Instructor in Religion</i>	05 Gray
PORTUONDO, JOSE ANTONIO, Bach. en C. y L., Dr. en F. y L. <i>Visiting Assistant Professor of Spanish</i> <i>Columbia University</i>	Carr
PREDMORE, RICHARD LIONEL, B.A., M.A., D.M.L. <i>Professor of Spanish</i>	108 Gray
RANKIN, ROBERT STANLEY, A.B., A.M., Ph.D. <i>Professor of Political Science</i>	308 Library
RANKIN, WILLIAM WALTER, JR., B.E., M.A. <i>Professor of Mathematics</i>	C-102 W Duke (E)
REARDON, KENNETH JAMES, A.B., A.M. <i>Assistant Professor of English</i>	101 Branson (E)
REED, FREDERICK JEROME, M.E., M.S. <i>Associate Professor of Mechanical Engineering</i>	137 Engineering
REID, MALCOLM, B.S., M.S., Ph.D. <i>Visiting Professor of Zoology</i> <i>Monmouth College</i>	
RICHARDS, CLAUDE HENRY, JR., A.B., A.M., Ph.D. <i>Assistant Professor of Political Science</i>	304 Library
ROBERTS, HENRY STOUTTE, JR., A.B., Ph.D. <i>Assistant Professor of Zoology</i>	337 Biology
RODNICK, ELIOT H., B.A., Ph.D. <i>Professor of Psychology</i>	102 Bivins
ROPP, THEODORE, A.B., A.M., Ph.D. <i>Associate Professor of History</i>	314 Library
ROSE, JESSE LEE, A.B., M.A., Ph.D. <i>Assistant Professor of Latin and Greek</i>	303 Gray
RUDISILL, MABEL, A.B., M.A., Ph.D. <i>Associate Professor of Education</i>	1B5 W. Duke (E)
RUDOLPH, VICTOR JOHN, B.S., M.F., D.F. <i>Assistant Professor of Forest Management</i>	305 Social Science
SALES, REAMES HAWTHORNE, A.B., B.D. <i>Instructor in Religion</i>	02 Divinity
SANDERS, C. RICHARD, B.Ph., M.A., Ph.D. <i>Associate Professor of English</i>	3J W. Duke (E)
SAYLOR, JOHN HENRY, A.B., A.M., Ph.D. <i>Professor of Chemistry</i>	115A Chemistry
SCHAFER, THOMAS ANTON, A.B., B.D. <i>Assistant Professor of Historical Theology</i>	301-A Divinity



SCHETTLE, CLARENCE HENRY, A.B., A.M., Ph.D. <i>Associate Professor of Sociology</i>	215-C Social Science
SCHUMACHER, FRANCIS N., B.S. <i>Professor of Forestry</i>	314 Social Science
SHIELDS, JOHN HERMAN, A.B., A.M. <i>Associate Professor of Accounting</i>	203-A Social Science
SIMPSON, WILLIAM HAYS, A.B., A.M., Ph.D. <i>Associate Professor of Political Science</i>	313 Library
SLAY, JAMES MATTHEW, A.B., A.M. <i>Instructor in Education</i>	103 Administration
SMITH, DOROTHY, R.N., B.S., M.Ed. <i>Assistant Professor of Nursing Education</i>	M112 Hospital
SMITH, HILRIE SHELTON, A.B., Ph.D., D.D., Litt.D. <i>Professor of American Religious Thought</i>	302 Divinity
SMITH, ROBERT SIDNEY, A.B., A.M., Ph.D. <i>Professor of Economics</i>	111 Carr
SPENGLER, JOSEPH JOHN, A.B., M.A., Ph.D. <i>Professor of Economics</i>	322 Library
STEWART, RANDALL, M.A., Ph.D. <i>Visiting Professor of English Brown University</i>	2G W. Duke (E)
STINESPRING, WILLIAM FRANKLIN, B.A., M.A., Ph.D. <i>Professor of Old Testament</i>	105 Divinity
STRIPLING, HARRIETTE, A.B., A.M., Docteur de l'universite <i>Instructor in Romance Languages</i>	106 Gray
STROBEL, HOWARD A., B.S., Ph.D. <i>Instructor in Chemistry</i>	02 Chemistry
STUMPF, WIPPERT A., B.S., A.M., Ph.D. <i>Associate Professor of Education</i>	1D W. Duke (E)
SYDNOR, CHARLES SACKETT, A.B., Ph.D., Litt.D. <i>Professor of History</i>	101 Library
THOMAS, JOSEPH MILLER, A.B., Ph.D. <i>Professor of Mathematics</i>	221 Physics
THOMPSON, EDGAR TRISTRAM, A.B., A.M., Ph.D. <i>Professor of Sociology</i>	215-A Social Science
TORRE, ELIAS, Bach. de Instituto, Bach. Universitario, M.A. <i>Visiting Instructor in Spanish Rutgers University</i>	Carr
TRAVIS, MARTIN BICE, JR., A.B., M.A., Ph.D. <i>Assistant Professor of Political Science</i>	306 Library
TRUESDALE, JAMES N., A.B., A.M., Ph.D. <i>Assistant Professor of Greek</i>	303 Gray
WATSON, RICHARD L., JR., A.B., Ph.D. <i>Assistant Professor of History</i>	103 Gray
WEITZ, HENRY, A.B., Ed.M., Ed.D. <i>Associate Professor of Education</i>	304 Page
WELSH, PAUL, B.S., Ph.D. <i>Assistant Professor of Philosophy</i>	31 W. Duke (E)
WHARTON, GEORGE WILLARD, JR., B.S., Ph.D. <i>Associate Professor of Zoology</i>	334 Biology

WHITE, MARIE ANNE, MRS., A.B., A.M. <i>Assistant Professor of English</i>	2G4 W. Duke (E)
WHITRIDGE, EUGENIA R., MRS., A.B., A.M., Ph.D. <i>Assistant Professor of Sociology</i>	203 Carr
WILDER, PELHAM, JR., A.B., M.A., Ph.D. <i>Instructor in Chemistry</i>	218 Chemistry
WILLIAMS, JAMES WESLEY, A.B., B.S. in C.E., M.S. <i>Assistant Professor of Civil Engineering</i>	121 Engineering
WILSON, FREDERICK ELIPHAZ, A.B., A.M. <i>Associate Professor of German</i>	106-A Social Science
WOODY, ROBERT HILLIARD, Ph.B., A.M., Ph.D. <i>Associate Professor of History</i>	208 Gray
ZENER, KARL EDWARD, Ph.B., A.M., Ph.D. <i>Professor of Psychology</i>	205 Psychological Lab. (E)
ZUKOWSKI, HALINE, R.N., B.S., M.L. <i>Assistant Professor of Nursing Education</i>	

## *To Former Students and to Prospective Students of the Summer Session:*

The Summer Session at Duke University makes available to Duke students, to students from other universities and colleges, to teachers in elementary and secondary schools, and to other special students a notable program of instruction in many fields of knowledge, both academic and professional.

Course programs offered during the Summer are designed to meet special and particular needs as well as the more conventional requirements leading to specific degrees.

Undergraduates of Duke University who desire to accelerate their programs may complete the work for a degree in three years by attending two and one-half Summer Sessions.

Graduates of accredited high schools, both men and women, who have been admitted to the freshman class of Duke University may begin their work in the Summer Session.

Undergraduates from other colleges and universities may enjoy the special advantages of summer instruction at Duke, and transfer earned credits to their own institutions.

Graduate students who have been admitted to the Graduate School to study for the Master of Arts and Master of Education degrees will find courses arranged in sequence from summer to summer to meet their requirements.

Teachers from elementary and secondary schools who desire to earn credits toward the renewal of their certificates and who are interested in further teacher training in subject content and method may enroll in senior-graduate courses as special or unclassified students.

While the summer course program meets in many departments the needs of degree candidates, it goes beyond these limits in presenting also courses of wide general interest and, in addition, special non-credit lectures, concerts, plays, conferences, institutes, and workshops. Some of these special meetings such as the Institute for Teachers of Mathematics have a distinguished history and a national reputation. Others, such as the Science Teachers Laboratory Conference represent a pioneering adventure in the challenging field of science teaching in secondary schools.

Duke University's ample and modern research facilities will be available during the summer to all properly qualified students. These facilities include, as examples, the new physics building and research laboratories, and the vast resources of the Duke University libraries now containing more than one million volumes.

Again, as in 1950, Duke University extends to scholars interested in post-doctoral research an opportunity to further this research through the resources of the University Library and through contact with other scholars in related fields.

While the basic purpose of the Summer Session is to serve the academic and the professional needs of those who are interested in their own educational advancement, whether this be in basic knowledge, in teaching skills or in research, the University recognizes the need and provides a varied recreation program both athletic and social.

It is the hope of the University, of the summer faculty and the administrative officers, that former students and new students will find increasing values in each summer spent at Duke.

THE DIRECTOR.

# Admission



THE general requirement for admission to the Summer Session is graduation from an accredited secondary school, or its equivalent. Admission to the Summer Session does not of itself imply that a student is qualified to enroll in a particular course. Admission to specific courses is governed by the student's academic status (freshman, sophomore, junior, senior, graduate, special or unclassified, etc.) and by the prerequisites of the course in question.

## *Students in Residence at Duke University during the Spring Semester 1951*

Duke students in residence during the Spring Semester *should not* file the Summer Session application blank at the end of this BULLETIN but should enroll in their respective colleges during the advance enrollment period, the dates for which will be as follows:

### TRINITY COLLEGE AND THE COLLEGE OF ENGINEERING

April 24—Rising Sophomores

May 1-3—Rising Seniors

May 3-9—Rising Juniors and three-semester Sophomores

### THE WOMAN'S COLLEGE

April 27, 28, 30

### THE DIVINITY SCHOOL THE GRADUATE SCHOOL OF ARTS AND SCIENCES

May 1-2

## *Students Not in Residence at Duke during the Spring Semester 1951*

(A) UNDERGRADUATES: New students seeking to enter Duke University as freshmen or as undergraduates with advanced standing, and undergraduates who wish to re-enter the University should write the Admissions Office. Men will address their application to the



Director of Admissions, Trinity College and the College of Engineering; women will address their application to the Director of Admissions, the Woman's College.

Undergraduates, both men and women, enrolled in other universities and colleges who desire to earn in the Duke University Summer Session credits which are to be transferred to their own institutions, should apply directly to the Director, the Summer Session, Duke University, on the application form at the end of this *Bulletin*. They should give accurately and clearly all information called for on the application form.

Entrance requirements for applicants seeking to enroll as candidates for the Bachelor's degree are given in full in the *Bulletin* of Undergraduate Instruction.

(B) GRADUATES: Students with graduate standing and teachers in service with or without the Bachelor's degree who wish to earn credits toward the renewal or the advancement of their certificate and who do not wish to become candidates for a degree at Duke University should apply to the Director of the Summer Session on the application form at the end of this *Bulletin*.

Graduate students who are seeking admission to the Graduate School at Duke University *must also file* Graduate School application forms which may be secured by writing to the Dean of the Graduate School, Duke University, Durham, North Carolina (see p. 36).

### *Admission to Degree Candidacy*

Credits earned during the Summer Session may be applied toward the requirements of a degree in the case of students who have been admitted to degree candidacy by the proper University authority (see p. 39).

Rejection by one of the University's colleges or by the Graduate School of a student's application for admission to that school does not preclude admission to the Summer Session as a special or unclassified student.

### *Admission to Summer Session Classes*

All graduate students who have been admitted to the Graduate School of Arts and Sciences for summer work must also apply to and register with the Summer Session office. Those, however, who are in residence at Duke during the spring semester 1951 should not file the Summer Session application but should enroll in the Graduate School advance enrollment (see dates p. 14).

## *Kinds of Course Enrollment*

Summer Session courses may be taken for "Credit" or for "Non-Credit," or may be "Audited." A student's program may be exclusively in one of these categories, or may combine any two of them or all three. Students taking a full or partial program for Credit may enroll as Auditors or Non-Credit students in any number of additional courses.

**DEFINITION OF THE TERM "CREDIT":** A student who wishes a grade in a particular course must enroll in that course "for Credit." The Summer Session term "Credit" does not mean degree credit at Duke unless the student has been admitted as a degree candidate by one of the colleges or schools of the University. G. I. Bill benefits are available only to those veterans who enroll "for Credit."

Courses numbered 1-49 are primarily for freshmen, or freshmen and sophomores. Courses numbered 50-99 are ordinarily for sophomores, or sophomores and juniors. Courses numbered 100-199 are designed for juniors and seniors. Courses numbered 200-299 are planned for seniors and graduates. Courses numbered from 300 up admit graduate students only. Courses numbered from 200 up are limited in enrollment.

**CREDIT:** A student taking a course "for Credit" is expected to do all the work required and to take the final examination. He will receive a grade representing the quality of the work done.

<i>Undergraduate Grades</i>	<i>Graduate Grades</i>
A—excellent	E—exceptional
B—good	G—good
C—average	S—satisfactory
D—poor but passing	F—failure
F—failure	

**LENGTH OF COURSES AND CREDIT ALLOWED:** The Summer Session courses are of the same quality and credit value as courses in the regular semester. Credit earned in the Summer Session is in terms of semester hours. The majority of Summer Session courses carry 3 semester hours credit and require six weeks in residence. A limited number of basic courses in the sciences run for four weeks (Chemistry, Geology, Zoology) or five weeks (Physics). Introductory foreign language courses are given intensively on a three-week basis, as are a limited number of courses for teachers.

**THE NORMAL COURSE PROGRAM:** The normal and maximum program for a six-week term is 6 semester hours. The 4 and

the 5 semester hour courses in the sciences run for four and five weeks respectively and constitute a full course program.

**APPROVAL OF CREDITS FOR TRANSFER:** A student who desires to receive credit for Summer Session courses toward a degree at a university or college other than Duke must in his own interest obtain advance approval from the registrar or dean of that institution. This is done on the Course Approval form which will be supplied on request by the Director of the Summer Session.

Professional credits towards teachers' certificates are granted by the various state boards of education, each in accordance with its own carefully planned rules. Teachers in service, before enrolling for certification credit, should consult the rules laid down by their State Board of Education. If necessary, they should send to their State Board of Education a list of the courses in which they plan to enroll and inquire whether these will be acceptable for certification credit.

**NON-CREDIT:** "Non-Credit" enrollment is available to the student who wishes the privilege of participating in class discussions, exercises, and laboratory assignments but does not wish to take the examinations either mid-term or final. A "Non-Credit" student may do as much of the work of the course as he desires, but he may not take the final examination and he will not receive a grade. Full fees are required in "Non-Credit" enrollment.

**AUDITOR:** An auditor is entitled to listen to lectures and class discussions, but may not participate in discussions or take examinations. Students may not enroll as auditors in laboratory courses. A student carrying a full program for Credit may be given permission to audit as many courses as he desires without additional fees. Students carrying less than a full program for Credit may secure permission to audit but are required to pay the auditing fee.

### *Fees and Living Expenses*

#### The University Fee:

Covering registration, tuition, and medical care.....	\$12.00 per semester hour
Teachers in full-time service in Elementary and Secondary Schools .....	6.00 per semester hour
Nurses enrolled in Nursing Education courses.....	6.00 per semester hour

#### Laboratory Fees: (These where applicable are in addition to the University Fee.)

The School of Spanish Studies.....	\$15.00
Marine Laboratory .....	10.00

#### Fees for Special Conferences and Institutes:

Institute for Teachers of Mathematics.....	\$12.50
Science Teachers Laboratory Conference.....	6.00
Nursing Education Workshop .....	10.00

**Master's Degree Summer Session Fee:**

Candidates for the Master's degree who do 12 to 15 hours of the program in Summer Sessions and who complete the thesis and/or take the final oral examination in the Summer Session pay a degree fee of.....\$12.50  
 When more than 15 hours is taken in Summer Sessions and/or oral examination is taken in the Summer Session, the degree fee is.....\$25.00

**Auditing Fees:**

1. Students registered for a full course program may audit non-laboratory courses (with the permission of the Director) at no extra charge.
2. Students carrying less than a full course program may be granted permission to audit a course or courses on payment of half the University fee per semester hour audited.....\$ 6.00 per s.h.

**Late Registration Fee:**

Students who fail to register prior to the first class day of a given course will pay an extra fee of.....\$ 5.00

**Fee for Course Changes:**

Course changes after registration day other than those required by the University will be made only on payment of an extra fee of.....\$ 1.00

**Refund of Fees:**

a. When applications for withdrawal are received by the Director of the Summer Session before the close of registration on registration day, full fees will be refunded.

b. When applications for withdrawal are received by the Director of the Summer Session during the first four class days of a given term all but 20 per cent of the fees will be refunded.

c. When applications for withdrawal are received by the Director of the Summer Session after the fourth class day there will be no refund of fees.

## *Dormitory Accommodations*

The dormitory facilities of Duke University, West Campus, will be used for the 1951 Summer Session, except in the cases of The School of Spanish Studies and the Marine Laboratory. Four dormitory quadrangles will be available: Few, Craven, Crowell, and Kilgo. These quadrangles consist of thirty-seven separate houses designated by the letters of the alphabet, A through HH. Few Quadrangle will be used for graduate men; Craven Quadrangle for undergraduate men. Kilgo and Crowell Quadrangles will be used for women with designated houses reserved for graduate women and undergraduate women. The University does not provide living accommodations for married couples.

Most rooms are furnished for two persons. Only a limited number of rooms are furnished as singles for one person. Furniture consists of single beds, 39" x 74", with mattresses, an individual clothes closet for each person, a chest of drawers for two persons, a study table, chairs, bookcase, waste basket, and window shades. Linens, blankets, towels, and pillows are not furnished by the University.

The School of Spanish Studies will be housed in Southgate Hall on the Woman's College Campus. It includes a dining hall, recrea-

tional rooms, parlors, and bedrooms equipped for two persons.

The Marine Laboratory is located on Pivers Island adjoining the United States Bureau of Fisheries across the Newport River from Beaufort, North Carolina. Three cottage-type dormitories are available with a separate building for dining hall and social activity. All rooms in the Marine Laboratory dormitories are equipped for two persons.

#### DORMITORY ROOMS—RATES

Single Room.....	12 weeks' term.....	\$60.00	
	6 weeks' term.....	30.00	
	5 weeks' term.....	25.00	
	4 weeks' term.....	20.00	
	3 weeks' term.....	\$15.00	
	2 weeks' term.....	10.00	
	1 week's term.....	5.00	
Double Room.....	12 weeks' term.....	\$84.00	\$42.00 each person
	6 weeks' term.....	42.00	21.00 each person
	5 weeks' term.....	35.00	17.50 each person
	4 weeks' term.....	28.00	14.00 each person
	3 weeks' term.....	21.00	10.50 each person
	2 weeks' term.....	14.00	7.00 each person
	1 week's term.....	7.00	3.50 each person
Double Room Furnished as a			
Single Room and Occupied by			
One Person.....	12 weeks' term.....	\$80.00	
	6 weeks' term.....	40.00	
	5 weeks' term.....	33.35	
	4 weeks' term.....	26.70	
	3 weeks' term.....	20.00	
	2 weeks' term.....	13.35	
	1 week's term.....	6.70	

Applications for room reservations accompanied by the full amount of the room rent for the term concerned should be made to Duke University Housing Bureau, Duke Station, Durham, North Carolina. Rooms will be reserved in the order in which applications are received. Notification of assignments to rooms will be made about May 15 for the first term; about July 10 for the second term.

Rooms are available to applicants twenty-four hours prior to the registration for a specific term of the Summer Session. A room is to be vacated by the occupant within twenty-four hours after the last final examination. Any period of occupancy other than for a specific term of the Summer Session must be arranged for at the Office of the Housing Bureau.

Applicants should be sure to express their preference as to roommates, if they have a preference. If no preference of roommate is expressed, the Housing Bureau will assign a roommate; however, the Office does not assume responsibility in this matter.



## Estimated Cost of a Six-Week Term:

University Fee, 6 s.h.....	\$ 72.00
(Teachers (elementary and secondary) in full-time service, \$36.00)	
Dormitory Room (2 occupants, \$21.00 per person) .....	21.00
Meals (Cafeteria selective: high average \$75.00, low average \$60.00) .....	67.50
Books and Class Materials \$7.00 to \$10.00.....	8.50
Miscellaneous (laundry, etc.) .....	12.00
Total (teachers (elementary and secondary) in full-time service deduct \$36.00) .....	\$181.00

*Enrollment of Veterans*

All veterans who plan to attend Duke University during the Summer Session 1951, and who expect to receive benefits under the so-called G. I. Bill of Rights should write directly and promptly for instructions to the Duke University Veterans' Office. This should be done as soon as the veteran is reasonably certain he will attend the Summer Session. Letters should be addressed to: The Veterans' Office, Administration Building, Duke University, Durham, North Carolina.

*Student Aid*

**SCHOLARSHIPS:** Teachers in full-time service in elementary and in secondary schools may apply for Summer Session Scholarships consisting of a rebate of one-half the University Fee. These scholarships are granted on certification by the applicant's principal or superintendent that he or she is a teacher in full-time active service.

**LOANS:** A number of loan funds have been established for the benefit of the students of Duke University. Several of these funds are available to students enrolled in the summer session. These funds are administered through a committee of officers of the University.

The sum which accrues annually for loans to students enrolled in the summer session is limited and not sufficient to cover all applications. The committee in approving loans selects those students who from the standpoint of character, scholastic attainment, personality, and degree of financial need, are most deserving of consideration.

The following regulations govern the operation of the summer session loan fund program:

1. No loan shall be made to a student who violates any of the regulations of the University or whose academic record is not satisfactory to the faculty.

2. All loans must be arranged for not later than one week after the beginning of a term.

3. Every applicant for a loan must obtain the signatures of two substantial people on a note which must be presented to the treasurer of the University before any money will be advanced. Only one of these co-signers may be a member of a borrower's family

4. No loan will be made to defray any expenses other than those incurred during the summer session for the University fee.

5. All loans must be repaid within six months following the close of the summer session in which the loan is made.

6. Interest at the rate of six per cent annually shall be charged for all loans.

7. Applicants for loans should make application to the loan committee office of the Secretary, Duke University. A formal application for loan assistance may be made only on forms furnished in the Secretary's Office during the first week of each term. The granting or withholding of a loan is a matter entirely within the discretion of the Loan Committee. A student is expected to use all other possible means of securing financial assistance before applying for aid from the loan fund.

**APPOINTMENTS OFFICE:** The Teachers' Appointments Office is maintained in Room 103, Page Building, the year around. The service of this Bureau is available to teachers registered for a degree in the Summer Session who may desire a change of position and to school officials who may be seeking the services of new teachers. There is no charge for this service.

### *The Bureau of Testing and Guidance*

The University maintains a Bureau of Testing and Guidance in which is centralized the counseling and guidance program for students. It is responsible for the administration of various testing programs throughout the year. Included in the responsibilities of the Bureau are admission tests, placement tests, vocational series, other specialized programs including the Graduate Record Examination, the Navy College Aptitude Test, the Medical College Admissions Test, and specific testing programs requested by the schools and colleges within the University. The Bureau likewise maintains facilities for research projects in the field of guidance and testing, and offers such services to schools and individuals outside the community as its facilities permit. Requests for further information should be addressed to the Director, Bureau of Testing and Guidance, Duke Station, Durham, North Carolina.

# Registration



ALL Summer Session students, whether or not pre-enrolled, whose classes begin on June 13 (first term) are required to present themselves at general registration in the large gymnasium, June 12, to complete their registration: to have their course programs confirmed, to effect course changes if necessary, to pay their fees if not paid in advance, to receive class enrollment cards, to fill out the Summer Session questionnaire, and to receive recreation cards.

Students whose first classes meet on June 18 (Physics S51), or on June 25 (Chemistry S1, S61, S151, Geology S51 and Zoology S1, S53) are not required to be present at general registration, June 12. They must, however, complete their registration in the Summer Session Office, 104 Page, *before* the day on which their classes begin.

## *Advance Registration*

### STUDENTS IN RESIDENCE AT DUKE UNIVERSITY DURING THE SPRING SEMESTER 1951

Students who have pre-enrolled in their respective colleges for Summer Session courses during the advance registration (see dates p. 14), and whose course programs have been approved by the college adviser may pay their fees:

- (a) At the Treasurer's Office, beginning May 15, OR
- (b) At general registration in the New Gymnasium on June 12.

Those whose classes begin June 13 are required to appear at general registration to complete their enrollment.

### DUKE UNIVERSITY UNDERGRADUATES (MEN AND WOMEN) NOT IN RESIDENCE DURING THE SPRING SEMESTER 1951, AND NEW UNDERGRADUATE STUDENTS SEEKING TO ENTER AS DEGREE CANDIDATES

1. Applicants who have been approved by the Admissions Office will present themselves at registration, June 12, if they wish to register for classes beginning June 13.

2. Students enrolling for classes beginning June 18 or June 25 must complete their registration at the Summer Session Office prior to the opening day of these courses.

REGISTRATION BY MAIL OF GRADUATE STUDENTS AND  
OF TEACHERS (BOTH GRADUATE AND UNDERGRADUATE)  
NOT IN RESIDENCE, SPRING SEMESTER 1951

1. Teachers of elementary and secondary schools seeking credits toward renewal of their certificates or further training in subject content and method are encouraged to select their courses and pay their fees in advance by mail (see Admission, B, p. 15). By doing so they insure themselves a reservation in the classes concerned, and facilitate the completion of their registration on registration day.

2. Graduate students who are *not* candidates for an advanced degree at Duke University may also register and pay fees in advance by mail as special or unclassified students (see Admission, B, p. 15). These students complete their registration on registration day, either on the campus or at the Marine Laboratory if their courses are given there.

### *Late Registration*

Since Summer Session courses present a program of study in more concentrated and rapid form than is the case in the regular semesters, students are advised to register on time and to be present at all class sessions. Late registration is permitted but under rules that are enforced rigidly.

Students will not be admitted to:

- (a) 3 s.h. classes after the fourth class day.
- (b) 4 s.h. classes after the third class day.
- (c) 5 s.h. classes after the third class day.

*Absences.* Full credit will not be allowed any student who incurs more than four absences in a course. Days missed through late registration are counted as absences.

### *Examinations*

Final examinations in courses are held on the two last days of each term. Final examinations for short courses which occupy the student's complete program will be held on the last day of the course. The examination dates for 1951 are:

First term: July 20-21.

Second term: August 30-31.

Courses in science which begin after the opening date for the first term have been scheduled so that their final examination will come on July 21. The science courses which begin July 23 and run for four weeks will have their final examination on August 18. Final examination for Physics S52 will be on August 25. The University has no provision for giving examinations *in absentia*. Students absent from examinations for valid reasons are permitted a liberal extension of time to return to the University for completion of credit.

# Resources of the University



## *The University Libraries*

THE University Libraries, with more than 1,000,000 volumes and 1,250,000 manuscripts, provide exceptional resources and facilities for study and research by undergraduate and graduate students, and visiting scholars. Between 30,000 and 40,000 volumes are added annually, while seventy foreign and domestic newspapers and 3600 periodicals are received currently. There is also a large collection of microfilms of rare books, newspapers, and periodicals.

A Chemistry library (15,000 volumes), Physics-Mathematics library (14,000), and Biology-Forestry library (42,000), are housed for convenience of use in the buildings of these departments. The libraries of the schools of Divinity (50,000), Law (92,000), Medicine (50,000), and of the College of Engineering (15,000) are also shelved in the buildings of these schools, all on the West Campus.

The General Library, centrally located on the West Campus, has 650,000 volumes in all other fields, and is the principal working and research collection for students in the humanities and social sciences. The collection has been developed with care to support the work of the undergraduate curriculum and the more specialized needs of graduate and post-graduate research. Basic collections of source materials are supported by the important publications of criticism and discussion. There are large collections of general periodicals, of the publications of European Academies, and of public documents of state, federal and foreign governments, as well as of international organizations. The newspaper collection (about 13,000 volumes and 2,000 rolls of microfilm), is particularly strong in papers from the states of the Atlantic seaboard, both North and South, with extensive holdings of Ante-Bellum and Civil War papers of North Carolina, South Carolina, and Virginia.

The manuscript collection, relating chiefly to the South Atlantic region and particularly strong in the Confederate period, is most extensive in the field of history, but contains important source material on all phases of social and economic life as well as of politics. There are also groups of manuscripts in American and British literature, with a notable Walt Whitman collection, and a number of important mediaeval manuscripts, chiefly lectionaries and copies of the

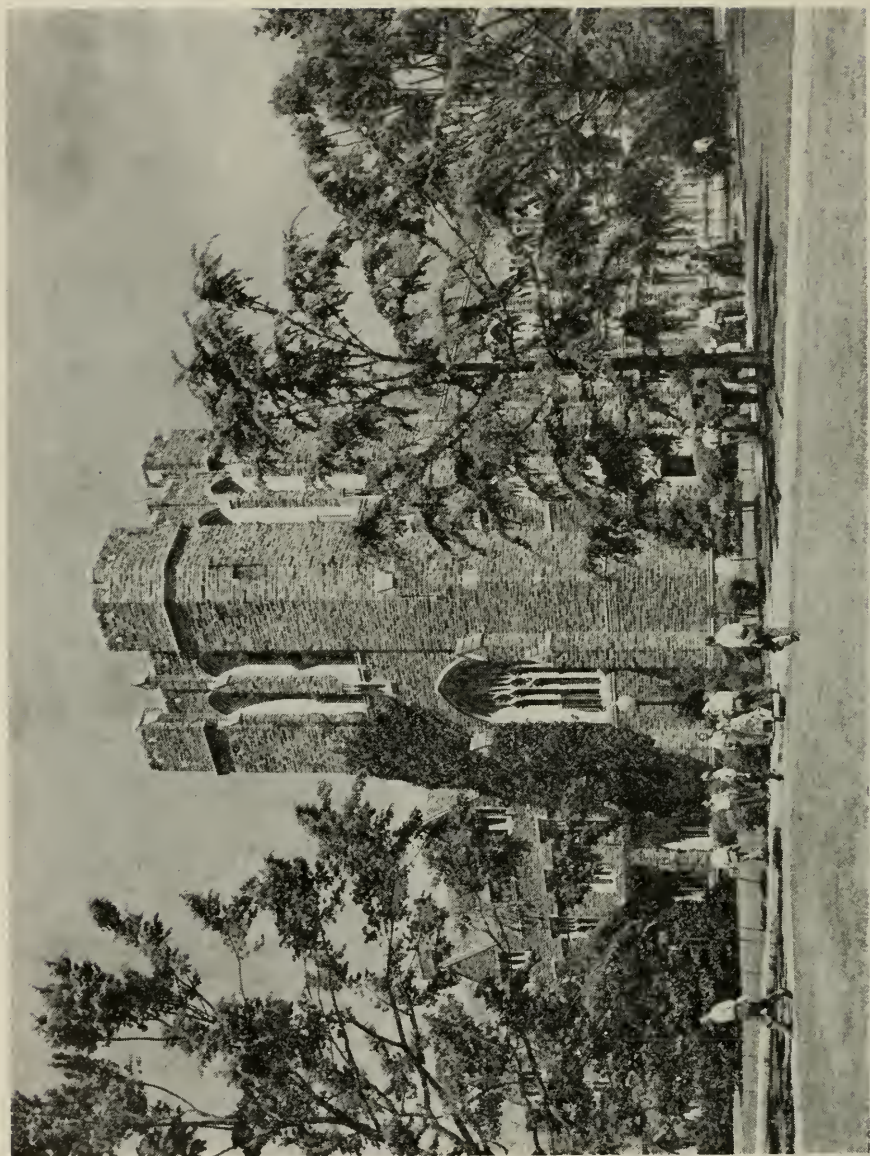


New Testament. Among many special collections of note are the Guido Mazzoni library of Italian and comparative literature, the Lanson Collection of French literature, Goethe and Dante collections, collections on Brazil, Peru, Ecuador, and the Philippines, the Holl Church history library, eighteenth-century English poetry and prose, a Socialist collection, the Arents tobacco collection, the Thomas collection of books on Chinese history and culture, the George Washington Flowers Collection of manuscripts, books, newspapers, and pamphlets dealing with all phases of Southern history, and the Trent Collection of Walt Whitman books and manuscripts.

The General Library building, which was modernized and enlarged in 1949, contains many special features which contribute to the preservation of materials and facilitate their use by students and research workers. The book stacks, manuscripts, and rare book storage and reading rooms are air-conditioned. Two hundred and fifty carrels, some completely enclosed, are available in the stacks as places of study. Graduate and advanced students are permitted free access to the stacks. On the ground floor is a newspaper reading room with a battery of microfilm reading machines, and a microphotography laboratory with facilities for reproducing printed and other material. On the same floor are the manuscripts reading room and storage area. The first floor has a periodical reading room, a graduate reading room, and an undergraduate reading room, the latter opening into an attractively furnished small library for recreational reading. In the North wing is the rare book reading room, with adjoining special collection rooms and storage stacks. The second floor houses the general reference and reading room, the circulation department and Main Loan Desk, and the Public Card Catalog, a union catalog of books in all the University libraries. There is also a catalog of the library of the University of North Carolina at Chapel Hill, whose books are available through inter-library loan.

On the East Campus, the Woman's College Library, in its attractive Georgian building, contains nearly 85,000 volumes in an open stack collection, chiefly those most constantly needed in the undergraduate work of women students. A reference and general reading room, the Thomas Memorial Room, and the Booklovers' Room, with open shelves of books for general reading, provide comfortable and attractive space for reading and study.

All libraries of the University are open for use throughout the summer. A "Student's Guide to the General Library," and a brochure on "The Library of Duke University" which describes the building and collections in greater detail, are available on request addressed to the Librarian of the University.



THE LIBRARY TOWER, WEST CAMPUS, DUKE UNIVERSITY

## *The Science Laboratories*

**BOTANY:** Research facilities in botany are fully adequate in fields of the more fundamental aspects of plant science. Supervision and consultation for investigators are provided by a trained and experienced staff, specialists in the various fields.

While many of the facilities for research are concentrated at Duke University, ideal locations for certain fields are provided at the Duke University Marine Laboratory at Beaufort, North Carolina, and at Highlands Biological Laboratory at Highlands, North Carolina.

At Duke University, in addition to well equipped laboratories in the various fields of botany, special facilities such as greenhouses and refrigerated and air-conditioned rooms are available.

The herbarium, containing 125,000 specimens, is particularly strong in material from North Carolina and other southeastern states and includes notable collections of mosses, ferns, and grasses. The Biology-Forestry Library contains outstanding collections of books and serials, including most of the important American and foreign periodicals in botany.

Unique assets for research are the Sarah P. Duke Garden on the West Campus and the Duke Forest, comprising some eight thousand acres of woodland adjacent to the Campus.

The Marine Laboratory is located exceptionally well for the study of ocean plant life as well as the unique Coastal Plain flora. The Highlands Biological Laboratory is located in the richest vegetation area of the Southern Appalachian Mountains, perhaps the most interesting region floristically in North America. Scholarships for research during the summer months are offered at both stations.

**CHEMISTRY:** Undergraduate and graduate work in Chemistry is conducted in a modern building with a floor area of some 57,000 square feet. The maximum capacity of any undergraduate laboratory is 24 persons which assures individual instruction. Each laboratory desk is furnished with all essential services and stockrooms are conveniently located.

Graduate work in Chemistry is carried on in laboratories designed for research and advanced teaching. There are 25 double research rooms completely equipped. In addition, a number of specially designed rooms are available for research, such as a photographic room, constant temperature room, distillation room, and rooms equipped for dielectric constant and magnetic measurements. A glass-blowing room and a well-equipped shop, operated by a competent mechanic, provide facilities for the construction of special apparatus and for the repair and maintenance of instruments.

The Chemistry Library with some 14,000 volumes is open to both



graduates and undergraduates. The main lecture room is equipped with slide projectors and a motion picture machine.

**PHYSICS:** The Physics Department offers exceptional opportunities to students working for advanced degrees, who value individual attention and personal contacts with the instructional staff. They will find at Duke University a department which is thoroughly modern. It is engaged in research in some of the most vital fields of Physics, and it offers a complete curriculum of advanced courses.

A new building, devoted exclusively to Physics, was completed in 1949. This building, covering about 62,500 square feet, constitutes one of the most modern and best equipped plants of its type. It contains in addition to facilities for research, for intermediate Physics and for elementary Physics, described below, a departmental library and ample shop facilities.

Five laboratories, dark rooms, two lecture rooms, several class rooms and three stock rooms are devoted to the elementary work. The lecture rooms are air conditioned and without windows which makes it possible to show all demonstrations requiring a dark room. The store rooms are equipped with sufficient equipment to perform all experiments required in elementary courses.

**ZOOLOGY:** The Zoological Laboratory is designed for both teaching and research in various fields and includes in its facilities animal rooms, a refrigerated room, dark rooms, air-conditioned room, and equipment for experimental work in radioisotopes. In addition, the Department of Zoology enjoys the availability of three unusual assets—the Duke Forest, the Duke University Marine Laboratory, and an outstanding library.

The Duke Forest, comprising some 8,000 acres of woodland adjacent to the campus, is very conveniently located for field work on forest, stream, and soil animals and for the collection of biological materials for laboratory studies. This affords fine opportunities for research in ecology, entomology, vertebrate and invertebrate zoology.

The Duke University Marine Laboratory at Beaufort, North Carolina, offers to seniors and graduate students formal courses in several branches of marine zoology during the summer months and is available for research throughout the year. The laboratory is fortunate in its location with an abundant marine fauna and proximity to varied coastal plain habitats.

The Medical School Library, which is available to graduate students in Zoology, together with the Biology Library, subscribe to more than 800 journals and have a collection of 90,000 volumes.

## *The Chapel*

The Duke University Chapel stands at the head of the main quadrangle of the West Campus, its two hundred and ten foot tower dominating the University buildings. The cloisters of open arches flanking either side of the tower and connecting it with other buildings of the quadrangle express the architectural union of the Chapel with the campus.

Patterned after English Gothic cathedrals, the Chapel attracts daily visitors and students from many lands. The portal with its sculptured figures of churchmen and statesmen; the stained-glass windows, which portray characters and stories from the Bible; the lime-wood figures of the patriarchs, apostles and saints in the niches of the oak choir-stalls and reredos; the small Memorial Chapel with recumbent statutes and tombs of Washington, Benjamin and James Duke; the great Aeolian Organ with a four-manual console and 7,791 pipes; the Carillon in the tower with fifty bells—are sources of interest and inspiration.

But the Chapel represents more than architectural symmetry and beauty. Standing at the heart of the University Campus, it is a perpetual reminder of the "Aims of the University."

The aims of Duke University are to assert a faith in the eternal union of knowledge and religion set forth in the teachings and character of Jesus Christ, the Son of God; to advance in all lines of truth; to defend scholarship against all false notions and ideals; to develop a Christian love of freedom and truth; to promote a sincere spirit of tolerance; to discourage all partisan and sectarian strife; and to render the largest permanent service to the individual, the state, the nation, and the church. Unto these ends shall the affairs of this University always be administered.

The Chapel is the home of Duke University Church, Interdenominational. The Church encourages the cultivation of the spiritual and moral life of students through participation in the service of worship which is held each Sunday morning at eleven o'clock. The pulpit is occupied by a regular University preacher, or a special visiting preacher. Choral music for these services is provided by a volunteer student choir.

Organ recitals are presented periodically by the University organist, and Carillon recitals twice a week, on Sunday afternoon and Thursday evening, by the University carillonneur.

## *The Sundial*

During the Summer Session the University will publish each Saturday *The Sundial*, an official calendar and newsletter announcing events academic, social and recreational of the following week. This calendar also includes official notices concerning academic requirements. Students are expected therefore to read *The Sundial* regularly.



## *Special Conferences and Institutes*

**THE SCHOOL OF SPANISH STUDIES:** The tenth annual session of the School of Spanish Studies, June 12 to July 21, will present a program including undergraduate work of the first three years and advanced oral Spanish, as well as graduate work in syntax and in Spanish and Spanish-American literature. In addition to the regular staff of Duke University, native visiting professors and native assistants will aid students in their everyday use of Spanish.

Faculty, assistants, and all students enrolled in Spanish will live and have their meals in the *Residencia* (Southgate Hall), where the use of the Spanish language will be required. The parlors and game-room of the *Residencia* will be the center of an Hispanic social program. A member of the staff or a native assistant will be in charge of conversation at each dining table. Bona fide residents of Durham, or those who are registered in one course in another department may seek, with the permission of the Director of the School, adjustment in the rule concerning living in the *Residencia*.

Because of the special facilities provided in the School of Spanish Studies, a special fee of \$15.00 is charged. All other expenses are the same as in other departments of the Summer Session. Payment for board for the six-week session must be made at the time of registration. *In the Residencia personal radios are not permitted.*

The program of the School of Spanish Studies is intended for the following:

1. High School and College teachers who wish to refresh their active use of Spanish, or to pursue advanced courses.
2. Graduate students and undergraduates who are majoring or minoring in Spanish.
3. Prospective teachers of Spanish and specialists in other fields (business, government service, history, etc.) whose work may require a knowledge of Spanish.
4. Undergraduates who plan to fulfill their requirement in foreign language by courses in Spanish and who desire more than a reading knowledge of the language.

For details of the School of Spanish Studies, write the Director of the Summer Session for the special *Bulletin*. The course offerings of the School are listed in this *Bulletin*, p. 66.

**THE INSTITUTE FOR TEACHERS OF MATHEMATICS:** The Institute for Teachers of Mathematics will hold its eleventh annual session at Duke University, August 7 to 17. The theme of the Institute, "Mathematics at Work," is designed to give teachers a firmer grasp on practical problems of classroom work. The Institute

comprehends the fields of junior and senior high school through sophomore work in college.

This year's Institute will emphasize applications of mathematics to current problems in industry, business and science. Lecturers and teachers of recognized ability in industrial and scientific research and in techniques of the classroom will direct the program. Ten study groups will be arranged under the leadership of these teachers. Study group topics will include: Aids in the Study of Algebra, Plane and Solid Geometry, Analytical Geometry and Calculus, The Slow Student in Mathematics, Supervision, Junior High School Mathematics, Elementary Mathematics from an Advanced Standpoint, History—Philosophy—Psychology of Mathematics, General Mathematics Junior and Senior High School, Using Mathematical Instruments, Laboratory Mathematics for Junior High School, and Laboratory Mathematics for High School and College.

A separate Bulletin containing full details and program of the Institute will be ready for distribution about March 1. Requests for this Bulletin should be addressed to the Director of the Summer Session, Duke University, Durham, North Carolina. Attendance at the Institute is limited to 150.

**THE SCIENCE TEACHERS LABORATORY CONFERENCE:** During the Summer Session of 1951, Duke University with the cooperation of the North Carolina Department of Public Instruction will conduct a significant and a pioneering project in the field of science instruction in secondary and in elementary schools. The first in an annual series of Science Teachers Laboratory Conferences will be held at Duke University, July 23-27 inclusive.

The basic purpose of the Laboratory Conference is to acquaint the science teacher with practical and useful experiments that may be performed in his own classroom, and to give him actual training in the techniques involved in the setting up and execution of these experiments.

The scope of subject matter to be treated will cover both the biological and the physical sciences. The program of the Conference will represent an integrated course planned and conducted by the University's major science departments: Botany, Chemistry, Physics, and Zoology.

Morning and afternoon periods will be devoted to laboratory sessions in which members of the Conference will set up and carry out with the assistance of the instructor selected laboratory exercises designed especially as aids in the teaching of science. The evening sessions will be devoted to discussions of recent scientific developments and to social intercourse of the members.

Membership in the Conference will be limited. While no tuition

will be charged, there will be a registration fee of \$6.00. For full details please address requests to the Director of the Summer Session, Duke University, Durham, North Carolina.

**THE NURSING EDUCATION WORKSHOP:** In addition to the program of courses in Nursing Education, there will be a Nursing Education Workshop from June 24 through June 30. Each member of the workshop will be expected to study on a problem selected from one of the following general areas:

1. Organization and functioning of student-faculty government associations.

2. Construction and use of Achievement tests as related to classroom and clinical experience.

3. Improvement of nursing service through better organization, in service-education and orientation programs.

Faculty members of the Division of Nursing Education and of the Duke University School of Nursing will be responsible for the workshop. Resource personnel from nursing and related fields will also be available for consultation. While there will be meetings of the entire group to discuss matters of general interest, each student will work on one individual problem, using University personnel and facilities as needed.

The registration fee will be \$10.00. Nurses who wish to attend the workshop should write to Miss Dorothy M. Smith, Director of the Division of Nursing Education, Box 3247, Duke Hospital, Durham, North Carolina. A room may be secured in the Nurses Residence for \$1.50 per day. Meals may be secured in the University dining hall, cafeteria style, at reasonable prices.

All nurses wishing to participate in this workshop *should apply before May 1, 1951*, stating the area of interest, in order that sufficient time be given the faculty to plan resource personnel and facilities to the best advantage of the individual participant.

**ANNUAL CONFERENCE NORTH CAROLINA COUNCIL FOR THE SOCIAL STUDIES:** The annual conference of the Council for the Social Studies, a department of the North Carolina Education Association, will be held on the Duke University campus, June 19-22. Work of the conference will be built around the theme, "Helping Teachers to Supplement Their Teaching of Contemporary Problems."

The program will be of the "work-conference" type, with emphasis upon the problems involved in teaching contemporary problems. Other phases of the work of the social-studies teacher will be treated as needs seem to indicate. Assistance in planning an effective program has been invited from the supervisors of elementary education, school principals, specialists on the faculties of North Carolina colleges and universities, and from high school teachers.

Reservations should be made in advance by writing the Director of the Summer Session, Duke University, Durham, North Carolina.

**SUMMER INSTITUTE OF THE NORTH CAROLINA ENGLISH TEACHERS ASSOCIATION:** Principal meetings of the ninth annual English Institute of the North Carolina English Teachers Association will be held at Duke University, August 2-4. The annual luncheon and the afternoon meeting that follows will be held at Chapel Hill, North Carolina.

The work of the Institute will be conducted as round-table discussions, special lectures, reports of standing committees, and demonstrations. A lighter program will occupy one evening, while the academic and recreational facilities of Duke University will be at the disposal of persons attending the Institute. Rooms in the University dormitories and meals in the University dining halls will be available at reasonable prices. Full details of the program will be announced at the spring meeting of the Association in Asheville, North Carolina. For further information write the Executive Secretary, Professor Earl H. Hartsell, Box 1050, Chapel Hill, North Carolina, or Professor F. E. Bowman, Department of English, Duke University, chairman of the local committee.

**THE SCHOOL FOR ACCEPTED SUPPLY PASTORS:** The third session of the Duke Divinity School's short term for supply pastors will meet July 3-19, 1951.

Four or more courses are provided for each of the four years' required work. Each student is permitted to register for three courses. Those students who certify when registering that they have read the required reading for the courses desired may register for four courses.

Several scholarships will be offered to aid those who cannot attend without help. Application for aid must be made at the time of registration. Students must register and have received letter of acceptance from the school before coming to Duke.

Classes begin at 9:30 a.m. July 3rd and close at 12:30 on July 19th.

In addition to the twenty courses offered, there will be workshops to consider recreation, the right use of visual aids, church literature, and remedial English.

A luncheon will be held at 1:00 p.m. July 3rd for faculty and students. President A. Hollis Edens will welcome the group to the University. A banquet for faculty and students and their families will be held at 6:00 p.m. July 18th.

For schedule of courses, registration blanks, and further information, write A. J. Walton, Box 4984, Duke Station, Durham, North Carolina.



### *Post-Doctoral Research*

Scholars engaged in post-doctoral research find it advantageous and sometimes essential to use in summer the resources of the Duke University libraries. The University welcomes these visitors, and makes available to them the living accommodations of the dormitories and the dining halls during the Summer Session, June 12 to August 31. Application for these post-doctoral research privileges must be made in advance by letter to the Director of the Summer Session, giving the applicant's present position, the specific field of his research interest, and the dates during which he desires to be in residence. Approved applicants will be accepted subject to the availability of library and of dormitory space.

### *Recreation and Social Activities*

The Summer Session will provide a varied program of entertainment and recreation. These plans include summer concerts, movies presented twice weekly by Quadrangle Pictures, the traditional Sunday evening sings, weekly summer dances and open house social evenings with games for those who do not care to dance. Tours to areas of interest can be arranged for week-ends. Adequate facilities are available for those interested in swimming, tennis, and other sports. State clubs organized for the summer play an active part in all social activities.

### *Medical Care*

With the exceptions noted below, full medical and surgical care is furnished to all regularly matriculated students of the University, during the Summer Session, at no additional cost to them beyond the University fee for each six-week term of residence, or any shorter period. This service is under the direction of the University Physician with the cooperation of the staffs of the infirmaries and the University Hospital. It includes hospitalization for a maximum period of six days, medical and surgical care, drugs, dressings, X-ray work, and ward, but not special nursing. Refraction of eyes, treatment of teeth and of all chronic and pre-existing conditions, such as diseased tonsils, hernias, elective surgery, chronic skin conditions, endocrine disturbances, etc., or accidents or illness occurring during vacations or while off the campus, are not included in this service. The cost of braces and necessary orthopaedic appliances and of blood, as well as special nursing, must be borne by the student. A charge for board will be made of the student while he is in the hospital. All necessary telephone and telegraph charges will be borne by the student.



No illness is treated in dormitory or other rooms occupied by students. Students needing treatment for minor medical or surgical conditions have the attention of the Director of Student Health at his two daily visits to the infirmaries, which have day and night nurses on duty. Students developing serious conditions are promptly transferred from the infirmaries to the University Hospital, where they come under the care of the staff of the hospital. For admission to the hospital a student needs to present the receipt for his University fees or a certificate from an official of the Summer Session as evidence that he is matriculated in the Summer Session and entitled to hospitalization.

# Graduate Study in the Summer Session



A STUDENT who wishes to work toward the A.M., M.Ed., Ph.D., or Ed.D. degree must apply for admission to the Graduate School of Arts and Sciences. Only those students who have been officially admitted to the Graduate School will be required to register in the Graduate School. It is quite appropriate for a student who holds a bachelor's degree and who desires only professional credit to apply directly to the Director of the Summer Session for admission as a special or unclassified student. It should be understood, however, that the credit earned while the student is so listed is not credit toward an advanced degree in the Graduate School of Arts and Sciences. Students who look forward to taking an advanced degree by work in the Summer Sessions should make sure that all of their documents necessary for admission to the Graduate School (see below) have been forwarded to the Dean of that School.

To make formal application the student should address the Dean of the Graduate School, Duke University, requesting official application blanks. These should be filled out fully, in duplicate, and returned at the earliest moment. The other documents needed to complete the application, namely, transcripts, letters of recommendation, and Graduate Record Examination scores, must be forwarded directly from the institutions or individuals to the Dean of the Graduate School. In no case will such documents be accepted directly from the student.

In order that application to the Graduate School for summer work be given due consideration, the student should submit all of his documents to the Dean of the Graduate School by June 1 before the first term, and by July 10 before the second term of the Summer Session. It would be difficult to give applications received after these dates the same attention given those received earlier. After the application is accepted and approved, the student will receive a letter of admission to the Graduate School.

## *Admission to the Graduate School*

A student who has received the A.B. or B.S. degree after a four-year program at an accredited institution may be admitted to the

Graduate School. Ordinarily, he must have made in his undergraduate work an average of not less than a "B," or the equivalent, and he must not have concentrated excessively in one field of study, to the detriment of a rounded program. The student in his undergraduate work must have met substantially the requirements for the A.B. or B.S. degree at Duke University. Before admission can be granted, the student must submit for appraisal the following documents: (a) an official transcript of all his college or graduate work, to be forwarded directly from the registrar of his college to the Dean of the Graduate School of Duke University; (b) three letters of recommendation from persons best qualified to appraise the student. Scores on the Graduate Record Examination are required before full admission can be granted. If possible, the student should take all three phases of this examination in advance of his intended registration. Arrangements can usually be made through officials at the student's college, or by correspondence with the Educational Testing Service, 20 Nassau Street, Princeton, New Jersey. Should a student be unable to take the examination before the final admission date, he may—if his other documents are acceptable—be granted "provisional" admission until he takes the examination, which he must arrange to take at the first time it is offered, after his "provisional" admission.

### *Registration of Graduate Students*

Students who have received a letter of admission to the Graduate School from the Director of Admissions of the Graduate School should present themselves for registration at the official registration period, June 12 for the first term, and July 21 for the second term. The student should remember that his registration with the Summer Session is not equivalent to registration in the Graduate School, and he should be sure to present himself for official registration in the Graduate School, so that his course work can be accredited to his program leading to a degree. Students who have not been granted admission to the Graduate School, of course, do not register in the Graduate School.

### *Course Work Leading to Degree*

Graduate students who wish to work toward advanced degrees in the Summer Session, particularly in Chemistry, Economics, Education, English, History, Mathematics, Religion, Sociology, Spanish, and Zoology, will find a wide selection of courses offered by members of the Duke faculty and by visiting professors. Other departments ordinarily offering sequences of work leading to the Master of Arts degree in a series of summer terms are Botany, Political Science, and Psychology.

## *Special Requirements for Students Who Intend to Earn Degrees Solely by Summer Work*

Graduate students who expect to earn either their A.M. or M.Ed. degree entirely in Summer Sessions must meet a minimum residence requirement of 33 weeks. The same requirement of 33 weeks is held for those who do not complete their entire requirements in summers, but who present more than 15 semester hours earned in the Summer Session toward either the A.M. or the M.Ed. degree.

**STUDY FOR THE PH.D. DEGREE:** Students who are interested in working toward a Ph.D. degree should consult the detailed requirements as outlined in the *Bulletin* of the Duke University Graduate School of Arts and Sciences. Of the three years required as minimum residence, not more than one year can be earned in Summer Sessions. Full-time enrollment for one six-week term is counted as one-fifth of an academic year.

## *Requirements for the Master of Arts Degree*

**LANGUAGE REQUIREMENTS:** The candidate for the A.M. degree must have a reading knowledge of at least one foreign language. (The several departments reserve the right to specify which foreign languages are acceptable.) Evidence of such knowledge may be furnished in either of two ways: (1) by successfully passing an examination, officially conducted by the appropriate foreign language department at Duke University, or (2) by a transcript showing the completion of the third college year of one language, or the second college year of each of two acceptable foreign languages.

If the student must take the examination to satisfy this requirement, he may request—should he feel well qualified—the language examination required of candidates for the Ph.D. degree. By passing this examination, he may satisfy the requirements for both degrees at one time.

**MAJOR SUBJECT:** As a prerequisite to graduate study in his major subject, the student must have completed a *minimum* of 12 semester hours of approved college courses in that subject, and 12 additional semester hours in that subject or in related work. Since some departments require more than 12 semester hours, the student should read carefully the special requirements listed by his major department, which are included as headnotes to the course offerings in the *Bulletin* of the Graduate School.

In his graduate work, the student, in order to complete the course requirements for the A.M. degree, must present acceptable marks for 27 semester hours of graduate courses. In addition to these he must present a thesis, which carries a credit of 6 semester hours. Thus, his earned credit for the degree totals 33 semester hours.

**MINOR SUBJECT:** Beyond the work for his major, the student must take a minimum of 6 semester hours in a minor department, the department of the minor to be approved by his major department. The remaining 6 semester hours of the necessary 27 may be taken in either of these departments, or in another approved by the major department and by the Graduate School Council.

**TRANSFER OF CREDITS:** Under certain circumstances a maximum credit of 6 semester hours may be allowed for graduate courses completed elsewhere. The acceptance of credit up to this amount, however, will not reduce the minimum period of full-time registered residence at Duke University. In no case will credit be allowed for extension or correspondence courses.

With the approval both of the student's major department and the Dean of the Graduate School, a student who is granted such transfer credit may be permitted to register for as much as 12 semester hours of thesis research instead of the usual 6 semester hours. Or he may be permitted to fill out his schedule with as much as 6 semester hours of further undergraduate training or 6 semester hours of required language courses on the undergraduate level.

**CANDIDACY FOR THE MASTER OF ARTS DEGREE:** After a student who has been officially admitted to the Graduate School has successfully completed 12 semester hours of graduate course work, he may apply for candidacy for the A.M. degree. Two conditions must have been met: (1) he must have passed all of his course work with at least 3 semester hours of "G" (good) grade or better; and (2) he must present to the Dean of the Graduate School an endorsement of his candidacy by the Director of Graduate Studies in his major department.

**TIME LIMITS FOR COMPLETION OF THE MASTER OF ARTS DEGREE:** The candidate for the A.M. degree must complete all of his course requirements and the thesis within a period of six calendar years from the date of his initial registration. Credits earned over a longer period of time cannot be credited toward a degree.

The student who expects to complete all requirements for the A.M. degree in the Summer Sessions must file with the Dean of the Graduate School, during the first week of the term when he expects to complete the work, a statement of his intention.

**THE THESIS FOR THE MASTER OF ARTS DEGREE:** The thesis for the A.M. degree should demonstrate the student's ability to collect, arrange, interpret, or report pertinent material on his special research problem. Although a publishable document is not required, the thesis must be written in a literate style, and should exhibit the student's competence in scholarly methods and procedures.



**REGULATIONS AND PROCEDURES:** On or before July 1 of the summer in which it is expected the degree will be conferred, the student must file with the Dean of the Graduate School, on the official blank provided for that purpose, the final title of the thesis.

Four bound, typewritten copies of the thesis must be submitted, in approved form, to the Dean of the Graduate School at least one week before the date of the thesis examination. The copies will then be distributed to the several members of the examining committee.

**THE EXAMINING COMMITTEE AND THE EXAMINATION:** After consultation with the professor who has directed the thesis, the Dean of the Graduate School appoints an examining committee composed of the director of the thesis and two other members of the Graduate Faculty. The candidate appears before this committee for examination, which usually is restricted to the thesis and to the major field, and lasts for about one and one-half hours.

If the candidate successfully stands his examination, the examining committee certifies to his passing by signing the title page of the thesis. The candidate then returns the original and one carbon copy of the thesis to the Dean of the Graduate School, who deposits them in the University Library.

### *Requirements for the Master of Education Degree*

**PREREQUISITES:** The degree of Master of Education is granted ordinarily only to teachers or to others engaged in educational work.

Before a student is admitted to graduate study for this degree, he must have completed, on the undergraduate level, a minimum of 18 semester hours of approved work in Education, including courses in Educational Psychology, and courses in the History of Education, Educational Sociology, or School Administration.

Early in the program of his work, the student must pass successfully two examinations: (1) a test of general ability, and (2) a test designed to determine his ability to write acceptable English. The student, before the degree is conferred, must also present evidence testifying to at least two years of teaching experience, gained either before his admission to course work, or concurrently with it.

**REQUIREMENTS FOR THE DEGREE:** The M.Ed. degree may be earned either with or without the presentation of a thesis.

**WITHOUT THESIS:** Students who elect this plan must present a total of 33 semester hours. Twelve hours of this required work must include the *four* basic courses: Education 204, 210, 217, and 235. If a student, by examination, can demonstrate his competency in the subject matter of two of these courses, he may be granted exemption from the required work in these courses. In no case may he claim exemption for more than two.

Other requirements are: a departmental major (i.e., in Nursing Education, Elementary Education, Public School Administration, Public School Supervision, or Secondary Education) of at least 12 semester hours, and a minor of at least 6 semester hours in a department other than Education. Toward the end of his residence the student must pass a comprehensive examination on his departmental major and on the content of the four basic courses. Permission to take such examinations must be obtained from the Director of Graduate Studies of the Department of Education, and a notice of intention must be filed with him at least three weeks before the announced dates of the examinations.

**WITH THESIS:** Students who elect this plan are permitted to substitute a thesis for 6 semester hours of the required course work. The first 12 semester hours must be passed with a grade of "G" (good) on at least 6 semester hours, and with no grade below an "S." The student must also present a thesis subject approved by the Professor of Education who intends to direct it, and by two other members of the staff in Education, including the Director of Graduate Studies. Two of the three members of the approving committee must be permanent members of the Duke University Graduate Faculty. The title of the thesis must be filed with the Dean of the Graduate School at the same time as the titles for the A.M. theses (see above, p. 40).

In addition to the thesis, the student must present 27 semester hours of course credit. Of these, 6 semester hours must be earned in *two* of the basic courses in the Department; Education 204, 210, 217, or 235. Of the remaining 21 semester hours, 6 semester hours must constitute a minor taken outside of the Department of Education; at least 12 semester hours must be taken in the student's departmental major.

The regulations regarding submission of typed copies of the thesis and the thesis examination are the same as those for the A.M. degree (see above, p. 40).

**CANDIDACY FOR THE MASTER OF EDUCATION DEGREE:** After a student who has been officially admitted to the Graduate School has successfully completed 12 semester hours of graduate course work, he may apply for candidacy for the M.Ed. degree. Two conditions must have been met: (1) he must have passed all of his course work with at least 3 semester hours of "G" (good) grade or better; and (2) he must present to the Dean of the Graduate School an endorsement of his candidacy by the Director of Graduate Studies in his major department.

**TIME LIMITS FOR COMPLETION OF THE MASTER OF EDUCATION DEGREE:** The candidate for the M.Ed. degree must

complete all of his course requirements and the thesis within a period of six calendar years from the date of his initial registration. Credits earned over a longer period of time cannot be credited toward a degree.

The student who expects to complete all requirements for the M.Ed. degree in the Summer Sessions must file with the Dean of the Graduate School, during the first week of the term when he expects to complete the work, a statement of his intention.

## Divinity School Studies

**BACHELOR OF DIVINITY AND MASTER OF RELIGIOUS EDUCATION:** The degrees of Bachelor of Divinity and Master of Religious Education are administered by the faculty of the Divinity School. A limited number of courses carrying credits toward these degrees is listed in this *Bulletin* under the heading of Religion. Persons desiring credit toward either of these degrees must be regularly admitted to the Divinity School, and all courses listed for Divinity School credit must be registered and approved in the office of the Divinity School. This school publishes its own Summer Session *Bulletin*, a copy of which may be secured by addressing The Recorder, The Divinity School, Duke Station, Durham, North Carolina.

# Undergraduate Study in the Summer Session



UNDERGRADUATES in Duke University who desire to accelerate their programs may complete the work for a degree in three years by attending two and one-half summer sessions.

Undergraduates from other colleges and universities may enroll for summer instruction at Duke and transfer their earned credits to their own institutions.

By attending both terms of the Summer Session it is possible for a student to earn as many as twelve semester hours of credit.

Instruction of interest to undergraduates will be offered in the summer of 1951 in the following departments and colleges: Botany, Chemistry; Economics; Education; Nursing Education; Engineering; English; Forestry; French; Geology; German; Greek; Health and Physical Education; History; Latin and Roman Studies; Mathematics; Philosophy; Physics; Political Science; Psychology; Religion; Sociology; Spanish; and Zoology.

Undergraduates of Duke University both men and women who plan to attend the Summer Session should enroll with the Dean of their own college in Duke University. Undergraduates in other universities or colleges who seek transfer credits should apply directly to the Director of the Summer Session, Duke University, Durham, North Carolina, see pp. 14-15 of this *Bulletin*.

# Courses of Instruction



## *Minimum Enrollment Required for Courses*

ALL courses are offered subject to minimum enrollments. The University reserves the right to withdraw undergraduate courses in which fewer than twelve students enroll, senior-graduate courses numbered 200-299 in which fewer than ten students enroll, and graduate courses and seminars numbered 300 or above in which fewer than six students enroll. In withdrawing a course, the University attempts to avoid undue hardships on students. Sometimes, therefore, courses are offered in spite of small enrollments. Courses not listed will be given when a demand develops and an instructor is available. Some instructors, in residence but not on the faculty of the Summer Session, will permit students who wish to complete theses begun during the academic year to enroll in the Summer Session. Such students must present a written request from the supervising instructor to the Dean of the Graduate School and must make an application for enrollment in the Summer Session. If accepted for registration, they will pay the regular Summer Session fees.

## *Department Officers and Regulations*

Departments offering Summer Session programs are listed alphabetically. Under each department is given the name of the chairman and the name of the director of graduate studies. Where departments have set up special regulations for admission to candidacy for the Master's degree, these are included.

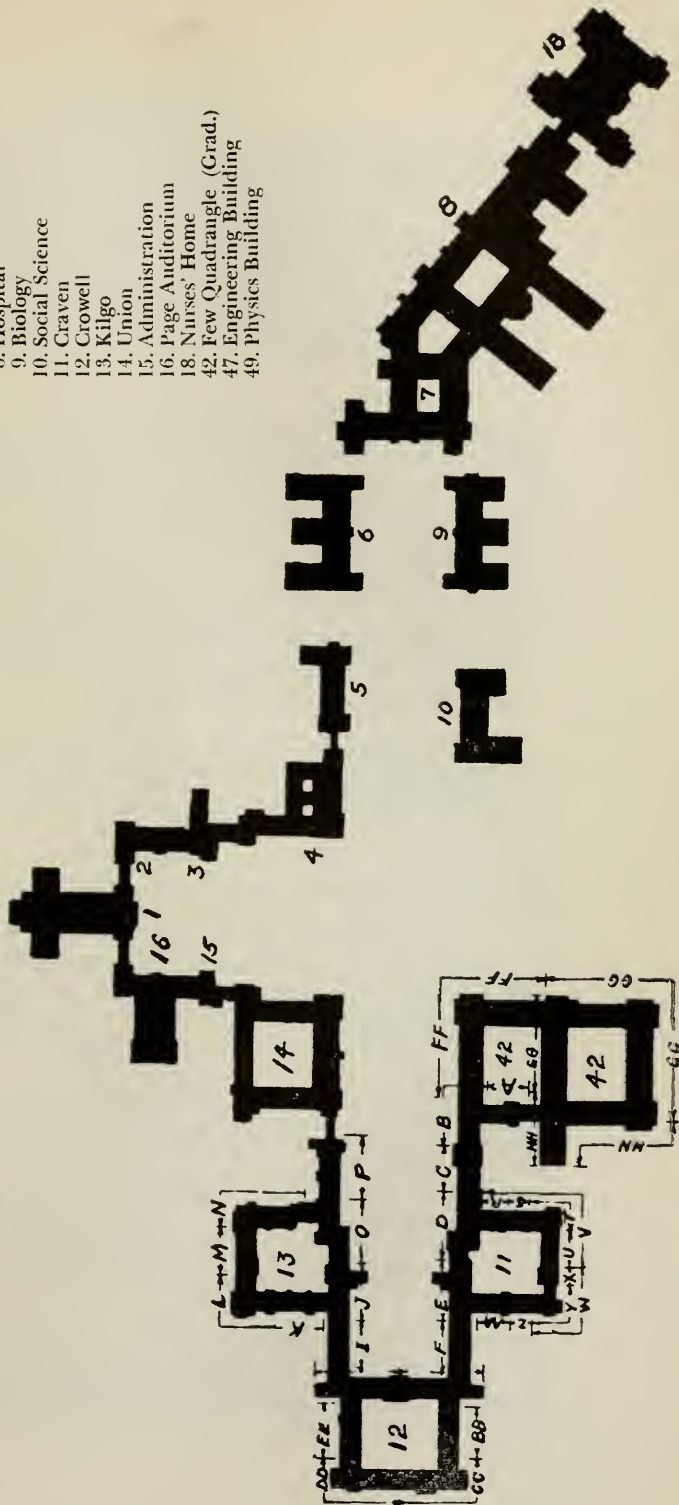
## *Key to Room Assignments for Classes*

The description of each course indicates the building and room in which the course is scheduled and the hour at which it will be given. For example: Botany S235 is scheduled as 9.210. This means Building 9, Room 210. The key to building numbers is given in the chart.



47

1. Chapel
2. Gray
3. Divinity School
4. Library
5. Law School
6. Chemistry
7. Medical School
8. Hospital
9. Biology
10. Social Science
11. Craven
12. Crowell
13. Kilgo
14. Union
15. Administration
16. Page Auditorium
18. Nurses' Home
42. Few Quadrangle (Grad.)
47. Engineering Building
49. Physics Building



## BOTANY

PROFESSOR HUGO L. BLOMQUIST, CHAIRMAN—203 BIOLOGY BUILDING (WEST CAMPUS);

PROFESSOR PAUL J. KRAMER, DIRECTOR OF GRADUATE STUDIES—

04 BIOLOGY BUILDING (WEST CAMPUS)

For admission to candidacy for the Master's degree in Botany, students must have completed a minimum of eighteen semester hours of biological science, including six semester hours of Botany in courses numbered above 100. Students who have not yet had the minimum eighteen hours, however, may enter higher courses by permission of the instructor, if he is convinced that they can carry the work for undergraduate credit, and may count such work toward the eighteen hours necessary for candidacy.

## FIRST TERM

S235. INTRODUCTION TO FIELD BOTANY.—A survey of the ferns and seed plants of the Piedmont; practice in identification; regular field trips to learn the common as well as rarer species in their native habitats. Prerequisite: one year of botany or equivalent. Lectures and field trip or laboratory daily, morning and afternoon, June 12-June 30. 9.210. 3 s.h. Mr. ANDERSON

S236. FIELD BOTANY.—A continuation of Botany S235, with field work extended to include a wide variety of vegetation. Experience in the identification of the more difficult families, collecting and preserving specimens, the keeping of records and use of the herbarium. Prerequisite: S235 or equivalent. Classes daily, morning and afternoon. July 2-July 21. 9.210. 3 s.h. Mr. ANDERSON

S225. SPECIAL PROBLEMS.—Hours to be arranged.

STAFF

S356. RESEARCH.—Hours to be arranged.

STAFF

## SECOND TERM (Marine Laboratory at Beaufort, North Carolina)

S225. SPECIAL PROBLEMS.—Hours to be arranged.

MR. BLOMQUIST

S359. RESEARCH.—Hours to be arranged.

MR. BLOMQUIST

## CHEMISTRY

PROFESSOR JOHN H. SAYLOR, EXECUTIVE OFFICER OF THE DEPARTMENT—115A CHEMISTRY BUILDING (WEST CAMPUS); PROFESSOR WARREN C. VOSBURGH, DIRECTOR OF GRADUATE STUDIES—211 CHEMISTRY BUILDING (WEST CAMPUS)

All first term courses in the Department of Chemistry will begin on June 25, and continue through July 21. All second term courses will begin on July 21 and continue through August 18. A course in chemistry constitutes a student's full program and occupies his entire time during each school day.

## FIRST TERM

S1. GENERAL INORGANIC CHEMISTRY.—Elementary principles of chemistry, the occurrence, preparation, properties, and uses of the elements and their compounds. Recitation daily, 8:00-9:00, 6.112; laboratory daily, 9:00-12:00, 6.108; lecture daily 12:00-1:00, 6.116. 4 s.h. Mr. STROBEL

S61. FUNDAMENTALS OF ANALYTICAL CHEMISTRY.—A study of the relations of electrolytes in solution and of chemical equilibrium illustrated by laboratory experiments involving the techniques of gravimetric, volumetric, and colorimetric analysis. Prerequisites: Chemistry 1-2 and Mathematics 6 or equivalent. Lecture or recitation daily, 8:30-10:00, 6.122; laboratory daily, 11:00-12:30, and 2:00-5:00, 6.208. 4 s.h. Mr. SAYLOR

S151. ORGANIC CHEMISTRY.—An introduction to the study of carbon compounds. Compounds of the aliphatic series form the basis of lectures, discussions, and laboratory experiments. Prerequisites: Chemistry S61. Recitation 8:00-9:00 daily, 6.01; laboratory 9:00-12:00 daily, 6.301; lecture 12:00-1:00 daily, 6.01. 4 s.h. Mr. BRADSHAW

S275. **THESIS RESEARCH.**—Research in the fields of physical, analytical, inorganic, or organic chemistry. Open to those students whose research programs for the A.M. and Ph.D. degrees have been approved by the department and by one of the instructors in charge of the course. Schedule to be arranged. (Not more than one semester hour of credit per week for full-time schedule or one semester hour each two weeks for half-time schedule.) 2 to 8 s.h. STAFF

## SECOND TERM

S2. **GENERAL INORGANIC CHEMISTRY.**—A continuation of S1. Prerequisite: Chemistry S1. Recitation daily, 8:00-9:00, 6.112; laboratory daily, 9:00-12:00, 6.108; lecture daily, 12:00-1:00, 6.116. 4 s.h. MR. ALLENSON

S70. **QUANTITATIVE ANALYSIS.**—(This course will be offered subject to a pre-registration of 12 persons.) A study of the theory and technique of inorganic gravimetric and volumetric analysis. Lecture or recitation daily, 8:30-10:00, 6.122; laboratory daily, 11:00-12:30 and 2:00-5:00, 6.208. 4 s.h. MR. HOBBS

S152. **ORGANIC CHEMISTRY.**—A study is made of compounds of the aromatic series and of carbohydrates and proteins. Prerequisite: Chemistry S151. Recitation 8:00-9:00 daily, 6.01; laboratory 9:00-12:00 daily, 6.301; lecture 12:00-1:00 daily, 6.01. 4 s.h. MR. WILDER

## ECONOMICS

PROFESSOR FRANK T. DE VYVER, EXECUTIVE OFFICER OF THE DEPARTMENT—203J SOCIAL SCIENCE BUILDING (WEST CAMPUS); PROFESSOR JOSEPH J. SPENGLER, DIRECTOR OF GRADUATE STUDIES—322 LIBRARY BUILDING (WEST CAMPUS)

### FIRST TERM

S51. **PRINCIPLES OF ECONOMICS.**—A short course in the essential principles of economic science. (This course will not count as a part of the minimum economics requirements for graduation until the equivalent of S52 has been completed. Credit for Ec. S51 will not be given until Ec. 52 has been completed). 10.209. 7:40-9:00. 3 s.h. MR. LANDON

S57. **PRINCIPLES OF ACCOUNTING.**—Elementary principles of single proprietorship, partnership, and corporation accounting. June 12-June 30. 10.204. 7:40-12:20. 3 s.h. MR. DICKENS

S58. **PRINCIPLES OF ACCOUNTING.**—A continuation of Economics S57. July 2-21. 10.204. 7:40-12:20. 3 s.h. MR. DICKENS

S115. **ECONOMIC GEOGRAPHY: TEACHERS' COURSE.**—A study of the interrelation of human activities and environmental elements. The discussion embraces location, maps and their interpretation, the major climatic regions, seasonal influences, weather, lands and their uses, soils, and minerals, bodies of water, plants, animals, and the works of man, as environmental factors. 10.208. 7:40-9:00. 3 s.h. MR. LEMERT

S118. **ECONOMIC GEOGRAPHY OF THE SOUTH.**—A study of the agricultural, commercial, and industrial development, with special emphasis upon the expansion of Piedmont industries. 10.208. 9:20-10:40. 3 s.h. MR. LEMERT

S138. **BUSINESS STATISTICS.**—A survey of the principal statistical methods and their application to economics and business administration. The course deals with collection of statistical data, construction of statistical tables and charts, and a brief study of the fundamental statistical concepts and techniques. Prerequisite: Mathematics 5 or the equivalent. 10.201. 9:20-10:40. 3 s.h. MR. HANNA

S143. **CORPORATION FINANCE.**—Principles and problems in the financial organization of corporations; the study of corporate securities, the management of capital, the distribution of earnings; industrial combinations; insolvency and reorganization. (Though not a prerequisite, Economics S57-S58, Principles of Accounting, is recommended to students electing this course.) 10.210. 7:40-9:00. 3 s.h. MR. JOERG

S144. INVESTMENTS.—A study of the investment policies of individuals and institutions; the securities markets; sources of investment information and data; the analysis and interpretation of financial statements. Prerequisites: Economics 57-58 or 60, and 143. 10.210. 11:00-12:20. 3 s.h.  
MR. JOERG

S171. ADVANCED ACCOUNTING.—Advanced accounting theory and practice applied to the managerial problems of valuation and operation in corporations, consolidations, mergers, and liquidations. Open to students who have completed Accounting 57-58. June 12-June 30. 10.212. 7:40-9:00 and 11:00-12:20. 3 s.h.  
MR. SHIELDS

S172. ADVANCED ACCOUNTING.—A continuation of Economics S171. July 2-July 21. 10.212. 7:40-9:00 and 11:00-12:20. 3 s.h.  
MR. SHIELDS

S217. POPULATION PROBLEMS AND RESOURCES.—A survey of population theory and policy. Study of national and international trends in population—growth and resource—use, together with analyses of their economic and social implications. 10.107. 7:40-9:00. 3 s.h.  
MR. SPENGLER

S236. PUBLIC FINANCE.—This course deals with public expenditures, public revenues, public debts, and financial administration. Not open to students who have received credit for Economics 187 or equivalent. 10.209. 11:00-12:20. 3 s.h.  
MR. HANNA

S265. INTERNATIONAL TRADE AND FINANCE.—A study of the fundamental principles of international trade and foreign exchange. Subjects covered will include international specialization, balance of payments, foreign investments, tariffs and commercial policies, exchange control, exchange rates, and international monetary problems. 10.107. 9:20-10:40. 3 s.h.  
MR. SPENGLER

S275. ADVANCED INDUSTRIAL ACCOUNTING AND MANAGEMENT.—This course traces the ways and means of executive control through statistics and industrial accountancy. Emphasis is put upon the economics of overhead costs. A complete practice set of accounting is worked by each student during the course. Prerequisite: Economics 171-172 and permission of the instructor. June 12-June 30. 10.214. 7:40-12:20. 3 s.h.  
MR. BLACK

S276. ADVANCED INDUSTRIAL ACCOUNTING AND MANAGEMENT.—A continuation of Economics S275. Prerequisite: Economics S275. July 2-July 21. 10.214. 7:40-12:20. 3 s.h.  
MR. BLACK

S318X. THESIS SEMINAR.—Hours to be arranged.  
MR. LANDON

## SECOND TERM

S52. PRINCIPLES OF ECONOMICS.—A continuation of Economics S51 (see First Term for description), emphasis on economic problems. 10.209. 7:40-9:00. 3 s.h.  
MR. SMITH

S173. AUDITING, THEORY AND PRACTICE.—This course prepares the manager to investigate the operation of his own business, the prospective investor to determine the value of the proposition, the student to practice the public accounting profession. The course deals with detail and balance sheet audits. Problems, working papers, and reports. Prerequisite: Economics 171-172 and permission of the department. 10.212. 7:40-9:00. 3 s.h.  
MR. MANN

S174. AUDITING, THEORY AND PRACTICE.—Continuation of S173. The course deals with special investigations. 10.212. 11:00-12:20. 3 s.h.  
MR. MANN

S181. BUSINESS LAW: CONTRACTS, ETC.—The fundamental principles of law as applied to common business transactions. July 21-August 11. 10.201. 7:40-9:00 and 11:00-12:20. 3 s.h.  
MR. HYLBURG

S182. BUSINESS LAW: PARTNERSHIPS, ETC.—A continuation of S181, dealing with agency, bailment, sales, negotiable instruments, partnerships, and bankruptcy. August 13-31. 10.201. 7:40-9:00 and 11:00-12:20. 3 s.h.  
MR. HYLBURG



**S231. THE ECONOMIC HISTORY OF EUROPE.**—The economic development of Europe from medieval times to the present, treating such topics as the guilds, mercantilism, money, banking, crises, the Industrial Revolution, and interrelations of government and business, and the economic consequences of war. 10.209. 11:00-12:20. 3 s.h. Mr. SMITH

**S318X. THESIS SEMINAR.**—Hours to be arranged.

## EDUCATION

PROFESSOR JOHN W. CARR, JR.—ACTING CHAIRMAN AND DIRECTOR OF  
GRADUATE STUDIES—104 PAGE (WEST CAMPUS)

For admission to candidacy for the Master of Arts (A.M.) degree with major in Education, or for the Master of Education (M.Ed.) degree, students must, in addition to meeting the general requirements for admission to the Graduate School, meet the following specific requirements: Credit for (1) eighteen semester hours of acceptable prior work in Education and (2) twelve semester hours of acceptable prior work in a minor field. If Psychology, Sociology, Economics, or Political Science is chosen for the minor, six semester hours of work completed after entering the Junior year in college will be accepted.

The degree of Master of Arts is available in the divisions of Public School Administration, Public School Supervision, Secondary Education, Elementary Education and Educational Psychology. Every candidate for the Master of Arts degree in the Department should elect at least twelve semester hours in one of these divisions in which he plans to write his thesis and the remainder of his work, including the six semester hours in his minor, with the approval of the proper division adviser. The degree of Master of Education is available in the divisions of Public School Administration, Public School Supervision, Secondary Education, and Elementary Education. Dr. Bolmeier and Dr. Stumpf are advisers to students in School Administration; Dr. Carr and Dr. Stumpf are advisers to students in Supervision; Dr. Carr and Dr. Rudisill are advisers in Elementary Education; Dr. Bolmeier and Professor Childs are advisers in Secondary Education; and Dr. Easley is adviser in Educational Psychology. Candidates for the Master of Arts and Master of Education degree should read with special care the regulations of the Graduate School as set forth on pages 37-43.

## FIRST TERM

**S84. SOCIAL FOUNDATIONS OF EDUCATION.**—Survey of the place and function of education and an understanding of the school as a social institution. 2.01. 9:20-10:40. 3 s.h. Mr. SLAY

**S118. EDUCATIONAL PSYCHOLOGY: PSYCHOLOGICAL DEVELOPMENT.**—This course traces the psychological development of the individual from infancy to maturity. The principal topics considered are: the interdependence of hereditary and environmental factors in development, the nature of the developmental process, the establishment of the early basic patterns of behavior, changes and conditions producing these changes throughout childhood and adolescence to maturity, and the origin and treatment of minor behavior disorders. To the degree practicable, students will observe children in typical and atypical situations as a means of securing concrete data on the problems treated in the course. Not open to students who have had Psychology 121 or 126. Prerequisite: three semester hours in psychology or educational psychology. 2.01. 7:40-9:00. 3 s.h. Mr. OSTWALT

**S203. PRINCIPLES OF SCHOOL ADMINISTRATION.**—An introductory course dealing with the organization and administration of a public school system. 3.108. 7:40-9:00. 3 s.h. Mr. BOLMEIER

**S205. CURRICULUM PROBLEMS IN SECONDARY EDUCATION.**—A consideration of the aims and objectives of secondary school subjects, emphasizing practical problems of curriculum-making in the high school. 3.205. 9:20-10:40. 3 s.h.

Mr. CHILDS



**S210. INTRODUCTION TO EDUCATIONAL RESEARCH.**—The general purpose of this course is to give the student an overview of research, acquaint him with the nature of research processes, and develop within him an appreciation of the essential characteristics of good research. This is one of the courses required for the Master of Education degree without thesis. Open to graduate students only. 3.209. 1:40-3:00. 3 s.h.

MR. STUMPF

**S213. PROBLEMS IN THE ORGANIZATION AND ADMINISTRATION OF ELEMENTARY SCHOOLS.**—A study of the work of elementary school principals. 3.207. 7:40-9:00. 3 s.h.

MR. STUMPF

**S216. PSYCHOLOGICAL PRINCIPLES OF SECONDARY EDUCATION.**—A study of adolescence and the psychology of learning as applied to teaching the principal high school subjects. 3.108. 11:00-12:20. 3 s.h.

MR. CHILDS

**S217. THE PSYCHOLOGICAL PRINCIPLES OF EDUCATION.**—An advanced study of teaching, learning, and the learner. Selected problems guiding the reading of students will be discussed in class. This is one of the courses required for the Master of Education degree without thesis. Open to graduate students only. 3.209. 11:00-12:20. 3 s.h.

MR. EASLEY

**S222. THE CURRICULUM AND MATERIALS OF THE ELEMENTARY GRADES.**—A study of curriculum problems in the elementary schools. 2.205. 11:00-12:20. 3 s.h.

MR. HILLMAN

**S225. THE TEACHING OF HISTORY AND THE SOCIAL STUDIES.**—The work consists of a discussion of the question of aims and values in teaching history and civics, textbooks, programs of study, methods of instruction, the use of maps and pictures, the making of lesson plans for use in high school, and other problems of high-school teaching. (Identical with History S211.) 3.101. 7:40-9:00. 3 s.h.

MR. MANCHESTER

**S232. PUBLIC SCHOOL SUPERVISION.**—This is the core course for majors in school supervision. The course will be conducted on a work-shop basis and the principal units of study will be selected on the basis of the chief needs of the students enrolled. They will include such topics as principles and techniques of supervision, planning and organizing a program of supervision. Attention will be given to the use and interpretation of tests, materials of instruction, pupil personnel adjustment, and such other areas as members of the class may select. From time to time specialists will be brought in to discuss problems dealing with their field of specialization. 3.07. 9:20-10:40. 3 s.h.

MR. HILLMAN

MR. HIGHSMITH

**S234. SECONDARY SCHOOL ORGANIZATION AND ADMINISTRATION.**—A study of the outstanding problems of secondary school organization and administration. 3.108. 9:20-10:40. 3 s.h.

MR. BOLMEIER

**S237. THE PSYCHOLOGY AND TEACHING OF READING.**—A study of the basic psychology of reading and principles, methods, and materials for the development of the various reading and study skills. Adapted to the needs of teachers of different grade levels. A2A (West Duke). 1:40-3:00. 3 s.h.

MISS RUDISILL

**S238. REMEDIAL READING—PRINCIPLES AND PRACTICE.**—A study of the basic causes of reading disability and of principles, methods, and materials for the diagnosis and correction of specific difficulties. The course provides practice with grade school children suffering reading retardation, including testing, diagnosis, and daily remedial teaching during the six-weeks period. A basic course in the psychology or teaching of reading is prerequisite, or Education S237 may be taken simultaneously. A2A (West Duke). 11:00-12:20. 3 s.h.

MISS RUDISILL

**S255. GUIDANCE FUNCTIONS OF THE CLASSROOM TEACHER.**—A consideration of the philosophy, methods and tools of guidance appropriate to the classroom teacher. This course is designed for students who do not plan to become guidance specialists, but who wish to apply the principles and techniques of guidance. Prerequisites: twelve hours in either education, or psychology, or a combination of the two. 2.105. 11:00-12:20. 3 s.h.

MR. WEITZ

**S258. EDUCATIONAL MEASUREMENTS.**—A critical study of the principles and techniques involved in measurement in education, with opportunity for individual research. Prerequisite: 12 semester hours in the Department, including a course in educational psychology. 3.201. 9:20-10:40. 3 s.h. MR. EASLEY

Thesis research credits are offered in either term by those members of the graduate staff of Duke University who are in residence. For this seminar work either three or six semester hours of credits are given, depending upon the student's period of residence and the work accomplished. Hours are to be arranged by the students and professors concerned. Thesis seminars offered are as follows:

S300X. THESIS SEMINAR IN PUBLIC SCHOOL ADMINISTRATION.

S317X. THESIS SEMINAR IN EDUCATIONAL PSYCHOLOGY.

S334X. THESIS SEMINAR IN SECONDARY EDUCATION.

S337X. THESIS SEMINAR IN ELEMENTARY EDUCATION.

S372X. THESIS SEMINAR IN PUBLIC SCHOOL SUPERVISION.

## SECOND TERM

**S88. EDUCATIONAL PSYCHOLOGY: LEARNING AND MEASUREMENT.**—This course and Education 118 constitute a general introduction to the field of Educational Psychology. This course deals with (1) the psychology of learning, including: the nature of the learning process; general principles or laws of learning; the course of learning and forgetting; factors influencing efficiency in learning and retention; and the transfer of training; and (2) measurement, including: the basic concepts in the measurement of intelligence; standardized achievement tests; the extent and significance of individual differences in ability and performance. Opportunity will be afforded for examination and study of a variety of tests of intelligence and achievement. 2.01. 7:40-9:00. 3 s.h. MR. OSTWALT

**S103. ORGANIZATION AND MANAGEMENT OF THE SCHOOL.**—An introduction to the problems of school organization and administration which are of particular concern to the classroom teacher. Although federal and state control over education is briefly reviewed, the main consideration is the local school system. Considerable attention is given to the administration of teaching personnel, pupil personnel, and the program of studies. 2.01. 9:20-10:40. 3 s.h.

**S204. THE SCHOOL AS AN INSTITUTION.**—The place of the school in society, its history and philosophy. Selected problems guiding the reading of students will be discussed in class. This is one of the courses required for the Master of Education degree without thesis. Open to graduate students only. 2.205. 7:40-9:00. 3 s.h. MR. BOLMEIER

**S208A. MENTAL TESTS AND APPLICATIONS.**—A study of the development of mental testing; various concepts of the nature and organization of intelligence, and their bearing on the theory and practice of testing; important features of group tests; and recent applications of mental tests. Prerequisite: Education S258 or six semester hours of other work in educational psychology or psychology. 3.07. 9:20-10:40. 3 s.h. MR. GARMEZY

**S232. PUBLIC SCHOOL SUPERVISION.**—For description see Term I. 3.201. 7:40-9:00. 3 s.h. MR. STUMPF

**S233. ADMINISTRATIVE PUPIL ACCOUNTING.**—An advanced study of gradation and classification of pupils, with incidental attention to the keeping of records and the making of reports. The course includes a consideration of individual differences, promotion, acceleration, and retardation of pupils; the various plans for classification and gradation; interpreting test scores; and some practice in the computation of statistical measures. The course is specifically designed to meet the needs of an elementary school principal. 2.102. 1:40-3:00. 3 s.h.

**S235. THE NATURE, FUNCTION AND REORGANIZATION OF THE CURRICULUM.**—A study of the fundamental bases for the curriculum, how the curriculum functions in the school program, and the techniques of curriculum construction. This is one of the courses required for the Master of Education degree without thesis. Open to graduate students only. 2.201G. 1:40-3:00. 3 s.h. MR. CARR

**S253. LEGAL PHASES OF SCHOOL ADMINISTRATION.**—The primary purpose of this course is to familiarize prospective school administrators with the legal features of school organization and administration. Although some attention is given to constitutional and statutory provisions, the main emphasis is upon court decisions relating to education. Students are expected to select appropriate problems in school law for intensive study. 2.205. 9:20-10:40. 3 s.h. Mr. BOLMEIER

**S267. THE TEACHING OF SCIENCE IN THE ELEMENTARY SCHOOL.**—This course deals with such topics as aims and values, curriculum materials, classroom procedures, lesson planning, and grade placement for science teaching in the elementary school. 2.102. 7:40-9:00. 3 s.h. Mr. HAUPT

**S275. THE ADMINISTRATION OF THE AUDIO-VISUAL PROGRAM.**—This course is intended for principals, superintendents, supervisors, and audio-visual coordinators. It deals with the problems of organization and administration of the audio-visual program, the location, selection and good educational use of materials, obtaining good teacher participation, and the selection and care of equipment. 2.201G. 11:00-12:20. 3 s.h. Mr. MATHEWSON

**S276. THE TEACHING OF HIGH-SCHOOL SCIENCE.**—Discussion, based upon lectures and collateral reading, of such topics as aims, tests for values, the curriculum, classroom procedure, course and lesson planning, secondary school science. Prerequisite: at least eighteen semester hours of science in college. 3.201. 9:20-10:40. 3 s.h. Mr. HAUPT

**S283. SCHOOL PLANT PLANNING.**—This course deals with architectural and construction services, school plant design, operation, maintenance and equipment. Emphasis is placed on educational and physical plant planning for public elementary and secondary schools. 2.101. 7:40-9:00. 3 s.h.

**S288. PROBLEMS OF MENTAL HYGIENE AND EDUCATION.**—The problems, objectives, scope, factors, and techniques of mental hygiene, particularly with reference to its educational and social implications; the prevention of hampering personality difficulties and development of wholesome personality; types of adjustment difficulties in different types of children; especially in the normal, and their preventive and remedial treatment; the mental hygiene of the teaching and learning. 2.102. 11:00-12:20. 3 s.h. Mr. GARMETZ

**S323. PUBLIC SCHOOL FINANCE.**—A study of educational costs, sources of revenue for the support of public education, collection of revenue, basis of distribution, and accounting for funds spent. 2.201G. 9:20-10:40. 3 s.h. Mr. STUMPF

For information regarding thesis seminar credits, see Term I.

## NURSING EDUCATION

### A DIVISION OF THE DEPARTMENT OF EDUCATION

MISS DOROTHY SMITH, R.N., DIRECTOR OF THE DIVISION OF  
NURSING EDUCATION. M112 HOSPITAL

#### FIRST TERM

**S84N. SOCIAL FOUNDATIONS OF NURSING EDUCATION.**—A survey of past and present trends and developments in nursing and nursing education which result from nation-wide social and economic changes. The primary purpose of the course is to give the student a better understanding of the place of nursing in present-day society and the responsibilities of the individual nurse toward that society. 9.110. 9:20-10:40. 3 s.h. Miss INGLES

**S101N. THE CURRICULUM OF THE SCHOOL OF NURSING.**—A discussion of the philosophical, psychological and sociological principles which influence the nursing school curriculum and the problems which are involved in determining the content and organization of that curriculum. 9.110. 7:40-9:00. 3 s.h. Miss SMITH

**S117N. COMMUNITY NURSING.**—This course includes a study of community health problems and the agencies designed to meet health needs. The purpose of the course is to give prospective teachers in schools of nursing the information and the understandings which are needed to integrate social and health concepts into various clinical areas of the basic nursing curriculum. 9.112. 7:40-9:00. 3 s.h.

MISS MASSEY

**S120N. NURSING EDUCATION.**—Problems in Nursing Care. Each student works out an individual problem designed to improve the nursing care of patients. Hours to be arranged.

MISS MOSER

MISS ZUKOWSKI

**S124N. TEACHING OF NURSING ARTS.**—In this course an effort is made to help teachers in schools of nursing to integrate the facts and principles of the social, biological and medical sciences with the teaching of nursing arts. Though major emphasis is placed upon the problems which are involved in planning and teaching the first course in nursing arts, the concept of the nursing arts as an integral part of each clinical area is stressed. 9.110. 1:40-3:00. 3 s.h.

MISS CRAWLEY

**S130N. PSYCHOSOMATIC NURSING.**—This course is designed to help the student to understand the interrelationship of mind and body in health and illness. She gains an understanding of emotional reactions and of interpersonal relationships which are useful to her in many areas of professional life. She learns to use techniques of observation and interview. The course includes lectures, clinics, conferences, discussions and experience with patients. 9.103. 7:40-9:00. 3 s.h.

MISS MOSER

**S136N. SEMINAR IN MEDICAL OR SURGICAL SPECIALTY.**—Directed study in a selected medical or surgical specialty. For the summer of 1951 the selected area will be cancer control. Individual research in the collection of original material as well as participation in group study of cancer control. 9.110. 11:00-12:20. 3 s.h.

MISS INGLES

**S192N. PRINCIPLES AND METHODS OF TEACHING IN SCHOOLS OF NURSING.**—The primary purpose of this course is to help teachers in schools of nursing to understand and to utilize generally accepted principles of learning in planning and carrying out a more effective teaching program in a school of nursing. Instruction is given in the planning of courses, in methods of teaching in classrooms and on hospital divisions, in construction of examinations and in the utilization of other methods of determining the effectiveness of a teaching program. 9.112. 11:00-12:20. 3 s.h.

MISS SMITH

**S195N. PERSONNEL WORK IN SCHOOLS OF NURSING.**—The primary purpose of this course is to help head nurses and supervisors to develop an understanding of the principles of human behavior and an ability to utilize these principles in bringing about more satisfactory relationships within a hospital division and between various departments of the hospital. 9.112. 9:20-10:40. 3 s.h.

MISS OSTERMAN

## SECOND TERM

**S193N. WARD ADMINISTRATION AND TEACHING.**—This course is designed to help head nurses better to understand their functions in planning and managing a program for a hospital division which will result in improved care of patients, greater satisfaction for professional and nonprofessional personnel and a more adequate ward teaching program for students and others. July 21-August 10. 9.112. 7:40-9:00 and 11:00-12:20. 3 s.h.

MISS INGLES

## ENGINEERING

PROFESSOR WILLIAM HOLLAND HALL, DEAN OF THE COLLEGE OF ENGINEERING—  
135 ENGINEERING BUILDING

The Summer Session offerings of the College of Engineering will be limited to those courses needed by students now in school to correct irregularities in their programs of study.



## FIRST TERM

C.E. 110. PLANE SURVEYING.—Use of instruments; transit, stadia and compass surveying; determination of meridian by observation on Polaris; differential and profile leveling; setting grade stakes; calculation of bearings, latitudes, departures and areas; methods of plotting; survey and plot of portions of campus by stadia, and transit and tape; care and adjustment of instruments. Prerequisites: G.E. 1 and Math 6. June 12-July 7. 47.117. 7:40-12:20. 4 s.h. Mr. BROWN

## SECOND TERM

G.E. S107. STRENGTH OF MATERIALS.—Elastic bodies under stress; flexure of simple, overhanging, fixed, and continuous beams; columns; combined stresses, etc. Prerequisite: G.E. 57. 47.222. 7:40-9:00. 3 s.h. Mr. WILLIAMS

G.E. S128. HYDRAULICS.—Hydrostatics; flow of water through orifices, weirs, pipes, and open channels; general principles of water wheels and turbines. Prerequisite: G.E. 57. 47.222. 9:20-10:40. 3 s.h. Mr. WILLIAMS

M.E. S52. KINETICS-MECHANISM.—Motions of particles. Applications of Newton's laws of motion to motions of rigid bodies. Work, energy, impulse, and momentum. Linkages, cams, gears, trains of mechanism. Three recitations, three laboratory hours. Prerequisites: G.E. 2, G.E. 57, Math 52. July 21-August 17. 47.224. 7:40-12:20. 4 s.h. Mr. REED

## ENGLISH

PROFESSOR WILLIAM H. IRVING, CHAIRMAN—2G-5 WEST DUKE BUILDING (EAST CAMPUS);  
PROFESSOR PAULL F. BAUM, DIRECTOR OF GRADUATE STUDIES—  
402 LIBRARY (WEST CAMPUS)

Candidates for the Master's degree in English are expected to have had at least twelve semester hours in undergraduate courses above the sophomore level. The Department may also require additional courses if the work of the student in his first term indicates inadequate preparation.

Master's candidates in English are required to elect S203. Those who have completed as many as twelve semester hours of graduate work should take also the bibliography course, S301, at their earliest opportunity.

## FIRST TERM

S1. ENGLISH COMPOSITION.—A course in the fundamentals of English composition, oral and written, with special attention to sentence structure, syntax, common errors. Frequent themes. 10.205. 7:40-9:00. 3 s.h. Mrs. WHITE

S2. ENGLISH COMPOSITION.—A continuation of course S1. 2.02. 11:00-12:20. 3 s.h. Mr. SANDERS

S119. HISTORY OF THE THEATRE.—The origin and development of drama, acting, and stagecraft from ancient Greece to the modern European and American theatre. Production problems of representative plays of the various periods will be discussed. Branson (E). 9:20-10:40. 3 s.h. Mr. REARDON

S121. PLAY PRODUCTION.—An introduction to the methods of producing a play, designed to meet especially the needs of teachers whose duties include the directing of plays. The course covers theatre organization, play selection, casting, rehearsing, scene design and execution, lighting, make-up and costume. Lectures, class discussion, and laboratory. Branson (E). 1:40-3:00. 3 s.h. Mr. REARDON

S131. VICTORIAN LITERATURE.—A study of the chief English writers of poetry, prose, and drama from Carlyle to Yeats. The major writers studied are Carlyle, Tennyson, Browning, Macaulay, Mill, Newman, and Arnold. Collateral reading from novels of the period. Lectures, discussions, tests, and a term paper. 10.205. 9:20-10:40. 3 s.h. Mr. SANDERS

S156. MODERN BRITISH AND AMERICAN DRAMA.—Types of drama are studied in relation to European influences and to the contemporary scene. 3.07. 11:00-12:20. 3 s.h. Mrs. WHITE



S203. CHAUCER.—Reading and interpretation of the text. A reading report or a term paper. 2.301. 7:40-9:00. 3 s.h. MR. BAUM

S227. LITERARY CRITICISM.—A study of the Greek and Roman critics, in chronological order but with emphasis on their permanent value rather than on the mere history; also the Continental and English critics to about 1700. Lectures, reports, and a term paper. 10.209. 1:40-3:00. 3 s.h. MR. GILBERT

S239. SHAKESPEARE.—An intensive study of selected plays and their background. Lectures, discussions, and reports. 3.201. 11:00-12:20. 3 s.h. MR. MEYER

S242. ENGLISH LITERATURE OF THE EARLY NINETEENTH CENTURY.—A study of the poetry and prose of Wordsworth and of the major poems of Coleridge. Lectures, discussions, and reports. 2.302. 7:40-9:00. 3 s.h. MR. MEYER

S273. HAWTHORNE AND HENRY JAMES.—Some of the more important tales and novels by Hawthorne and James will be studied, with special attention to themes and forms, and to certain comparisons between the two writers. 10.210. 9:20-10:40. 3 s.h. MR. STEWART

S281. METHODS IN THE TEACHING OF SPEECH.—A survey of the field of Speech with respect to areas, bibliographies, and application of them to the teaching of Speech on the elementary, secondary, and college levels. 2.306. 7:40-9:00. 3 s.h. MR. DICKEY

S282. AMERICAN ORATORY.—A survey of American oratory from Colonial times to the present. Attention will be focused on speakers in the realms of statecraft, the pulpit, and in reform movements, with particular regard to the influence of speaking on American history. 2.301. 11:00-12:20. 3 s.h. MR. DICKEY

S308X. SEMINAR IN AMERICAN LITERATURE.—For students writing theses in American Literature. Hours and credits to be arranged. 2.02 MR. STEWART

S349X. SEMINAR IN ENGLISH LITERATURE.—For students writing theses in English Literature. Hours and credits to be arranged. 2.102. MR. GILBERT

## SECOND TERM

S1. ENGLISH COMPOSITION.—For description see Term I. 10.205. 7:40-9:00. 3 s.h. MR. COOK

S2. ENGLISH COMPOSITION.—Continuation of course S1. 3.07. 7:40-9:00. 3 s.h. MR. BOWMAN

S56. REPRESENTATIVE ENGLISH WRITERS.—Swift, Fielding, Boswell, Keats, Arnold, Thackeray, and Shaw will be studied. 2.102. 9:20-10:40. 3 s.h. MR. BLACKBURN

S124. SHAKESPEARE.—Plays after 1600, with emphasis in class on *Hamlet*, *Othello*, *Lear*, and *Macbeth*. Recitations, short tests, and one or two essays. 2.01. 11:00-12:20. 3 s.h. MR. BOWMAN

S158. CONTEMPORARY FICTION.—Wide reading in contemporary novelists, from Thomas Hardy to James Joyce, with attention given to European literary and social influences. Written and oral reports. 3.101. 7:40-9:00. 3 s.h. MR. BLACKBURN

S234. AMERICAN LITERATURE SINCE 1870.—The realistic tradition in fiction: Crane, Norris, Dreiser, and their successors; the Poetical Renaissance; Frost, Robinson, T. S. Eliot; and the plays of Eugene O'Neill. 2.02. 11:00-12:20. 3 s.h. MR. BRASWELL

S274. MELVILLE.—Extensive reading in the works of Melville; intensive analysis in class of two or three of his books. Lectures, discussions, brief exercises in bibliography and criticism and a term paper. 3.106. 7:50-9:00. 3 s.h. MR. BRASWELL

## FORESTRY

PROFESSOR CLARENCE F. KORSTIAN, DEAN OF THE SCHOOL OF FORESTRY AND DIRECTOR OF GRADUATE STUDIES—307 SOCIAL SCIENCE BUILDING

Organized course work in the School of Forestry during the Summer Session is limited to plane surveying, forest surveying, and forest mensuration which are required of all students entering upon two years of study in technical forestry leading to the degree of Master of Forestry (M.F.)

Qualified students may engage in thesis research in certain branches of forestry during the Summer Session with the approval of the instructor concerned and the Dean of the School of Forestry or of the Director of Graduate Studies in the case of work taken through the Graduate School.

CE. S110. PLANE SURVEYING.—Use of instruments; transit, stadia, and compass surveying; determination of meridian by observation on Polaris; differential and profile leveling; setting grade stakes; calculation of bearings, latitudes, departures and areas; methods of plotting; survey and plot of portions of campus by stadia, and transit and tape; care and adjustment of instruments. Prerequisites: G.E. 1 and trigonometry. (Four weeks, eight hours a day.) June 13-July 10. 47.117. 4 s.h.

MR. BROWN

S150. FOREST SURVEYING.—Application of plane surveying to forest problems; practice in making boundary and topographic surveys of forested tracts, using both intensive and extensive methods. Work includes use of transit, level, traverse board, topographic abney and slope tape, and aneroid barometer. Prerequisites: Civil Engineering, S110 Plane Surveying, or equivalent. (Five weeks, eight hours a day.) July 11-August 14. 10.322. 5 s.h.

MR. RUDOLPH

S151. FOREST MENSURATION.—Field studies in methods of measuring content and growth of trees and forest stands; practice in timber estimating, log scaling, use of mensuration instruments, and collection of basic data. (Four weeks, eight hours a day.) August 15-September 11. 9.101. 4 s.h.

MR. SCHUMACHER

S261. FOREST SOILS.—Origin, development, and classification of soils with special emphasis on those developed in humid climates; morphological, physical, and chemical properties of soils in relation to growth of trees and the composition of forest stands; effect of forests on soils. Prerequisites: Chemistry 1 and 2, and Physics 1 or equivalents; physical geology, mineralogy, petrology and analytical chemistry are also desirable. (Three weeks, eight hours a day.) June 13-June 30. 10.301. 3 s.h.

MR. COILE

S357. RESEARCH IN FORESTRY.—Open to students whose research programs for the M.F. or D.F. degree have been approved by the Dean of the School of Forestry and the instructor responsible for directing the research and whose programs for the A.M. or Ph.D. degree have been approved by the Director of Graduate Studies and the instructor in charge. (Credits and schedule to be arranged.) June 12-August 31. 2 to 12 s.h. (Not more than one semester hour of credit per week for full-time schedule or one semester hour each two weeks for half-time schedule.) (Consult courses 301-302 in Announcement of School of Forestry for letter designation of branches of forestry in which research is to be conducted.) 10.307.

STAFF

## FRENCH

PROFESSOR E. R. JORDAN, CHAIRMAN OF THE DEPARTMENT OF ROMANCE LANGUAGES—214 CARR BUILDING (EAST CAMPUS)

## FIRST TERM

S1. ELEMENTARY FRENCH. June 12-June 29. 2.102. 7:40-9:00 and 11:00 12:20. 3 s.h. STAFF

S2. FLEMENTARY FRENCH. July 2-July 21. 2.102. 7:40-9:00 and 11:00 12:20. 3 s.h. STAFF

NOTE: A student enrolled in French S2 must also attend French S1.

**S3. INTERMEDIATE FRENCH.**—Standard literary tests (short story, novel, drama) are used as the basis for intensive drill on the essentials of vocabulary, idiom, and construction. Extensive oral exercises are included in the reading objective. Prerequisite: French 1-2, or two units of high school French. 3:106. 7:40 9:00. 3 s.h. STAFF

**S4. INTERMEDIATE FRENCH.**—Continuation of French S3. Prerequisites: French 3 or equivalent. 3:106. 11:00-12:20. 3 s.h. STAFF

**S51. INTRODUCTION TO FRENCH LITERATURE.**—Selected texts in modern French literature (fiction and drama) are approached from the literary as well as the linguistic point of view. Throughout the course there is systematic oral practice based on topics within the reading assignments. Prerequisite: French 3-4, or equivalent. 2:201G. 7:40-9:00. 3 s.h. STAFF

**S52. INTRODUCTION TO FRENCH LITERATURE.**—Continuation of French S51. Prerequisite: French 51, or equivalent. 2:201G. 11:00-12:20. 3 s.h. STAFF

## GEOLOGY

PROFESSOR E. WILLARD BERRY, CHAIRMAN—016 SCIENCE (E)

### FIRST TERM

**S51. GENERAL GEOLOGY.**—This course is designed to give a general view of the surface features of the earth, their origin, structure, and materials. Illustrative materials are studied in the laboratory. Excursions may be made to neighboring points where principles of the science are studied in the field. Lectures or recitation, 8:00-11:00 daily; laboratory 2:00-5:00, Monday through Thursday, June 25-July 21. 09 Science Building, East Campus. 4 s.h. MR. BERRY

### SECOND TERM

**S52. GENERAL GEOLOGY.**—This course is designed to give some knowledge of the chief events of the earth's history. Excursions may be made to suitable neighboring localities. Lectures or recitations 8:00-11:00 daily. Laboratory 2:00-5:00, Monday through Thursday, July 22-August 18. 09 Science Building, East Campus. 4 s.h. MR. BERRY

## GERMAN

PROFESSOR CLEMENT VOLLMEYER, CHAIRMAN—106A SOCIAL SCIENCE BUILDING (WEST CAMPUS)

**S1. ELEMENTARY GERMAN.**—The fundamentals of grammar and pronunciation; vocabulary drill, translation, and dictation. Emphasis upon a sound reading knowledge of the language and individual achievement. June 12 to June 29. 10:106b. 9:20-10:40 and 1:40-3:00. 3 s.h. MR. MAXWELL

**S2. ELEMENTARY GERMAN.**—The equivalent of the second college semester of German; intensive reading of graded material; grammar and vocabulary drill; dictation and sight translation. July 2 to July 21. 10:106b. 9:20-10:40 and 1:40-3:00. 3 s.h. MR. MAXWELL

NOTE: A student enrolled in German S2 must also attend German S1.

**S3. INTERMEDIATE GERMAN.**—Grammar and composition; dictation, spoken German; reading of narrative and dramatic prose. 10:106b. 7:40-9:00. 3 s.h. MR. WILSON

**S4. INTERMEDIATE GERMAN.**—Grammar and composition; dictation, spoken German; reading of narrative and dramatic prose. Prerequisite: German 3. 10:106b. 11:40-12:20. 3 s.h. MR. WILSON

## GREEK

ASSISTANT PROFESSOR JAMES N. TRUESDALE, CHAIRMAN—303 GRAY (WEST CAMPUS)

### FIRST TERM

**S121. GREEK LITERATURE: HOMER.**—*Iliad and Odyssey*. The purpose of this course is to give a general survey of the life and civilization of the Greeks, especially to those who have never studied the language but wish to become ac-

quainted with some of the choicest portions of the literature by the use of translations. The *Iliad* and the *Odyssey* are read in translation, and the excavations and discoveries at Troy and other cities of the Aegean age are discussed.

SI21.1. 3.205. 7:40-9:00. 3 s.h.

MR. ROSE

SI21.2. 2.205. 7:40-9:00. 3 s.h.

MR. TRUESDALE

SI22. GREEK LITERATURE: THE TRAGIC POETS.—The purpose of this course is similar to that of course SI21. Many of the extant plays of Aeschylus, Sophocles, and Euripides are studied in English translations. 3.205. 11:40-12:20. 3 s.h.

MR. TRUESDALE

## HEALTH AND PHYSICAL EDUCATION

E. M. CAMERON, DIRECTOR, TRINITY COLLEGE AND COLLEGE OF ENGINEERING—

109 GYMNASIUM (WEST CAMPUS)

MISS JULIA GROUT, CHAIRMAN, THE WOMAN'S COLLEGE—

101 GYMNASIUM (EAST CAMPUS)

### FIRST TERM

PE S53. HAND-BALL-TENNIS.—Gymnasium. 1 s.h.

MR. MONTFORT

PE S65. HISTORY AND PRINCIPLES OF PHYSICAL EDUCATION.—A study of the objectives and principles upon which physical education is based. The history of physical education is studied in order to show the changes in objectives, principles, and methods and as an aid in the interpretation of trends. Open to Sophomores, Juniors, and Seniors. Gymnasium. 9:20-10:40. 3 s.h.

MR. AYCOCK

HE S132. SCHOOL HEALTH PROBLEMS.—A course designed (a) to familiarize the teacher with school health problems such as physical screening, communicable disease prevention and control, healthful school environment; (b) to present methods and materials for health teaching in elementary and secondary schools. Gymnasium. 11:00-12:20. 3 s.h.

MR. AYCOCK

PE S190. PROTECTIVE PRACTICES IN PHYSICAL EDUCATION.—Training and conditioning of athletic teams and diagrams and treatment of athletic injuries. Gymnasium. 1:40-3:00. 3 s.h.

MR. MONTFORT

### SECOND TERM

PE S57. VOLLEY BALL-TENNIS.—Gymnasium. 1 s.h.

MR. MONTFORT

HE S132. SCHOOL HEALTH PROBLEMS.—For description see First Term. 9:20-10:40. 3 s.h.

MISS MCCORMIC

HE S141. PERSONAL HEALTH PROBLEMS.—A basic course in health information now required of all physical education majors and recommended to students in the elementary school teaching program as a course to meet three hours of the ten hours in health and physical education required for a teaching certificate in North Carolina. Gymnasium. 1:40-3:00. 3 s.h.

MISS MCCORMIC

## HISTORY

PROFESSOR WILLIAM T. LAPRADE, CHAIRMAN AND DIRECTOR OF GRADUATE STUDIES—

2B WEST DUKE (EAST CAMPUS)

For admission to candidacy for a Master's degree in History the student must present a total of eighteen semester hours of prior work in History, of which at least six must be in American History if he plans to take his major work in that field. Before enrolling for thesis supervision, candidates for the Master's degree are required to complete at least three semester hours of seminar work and are strongly urged to enroll for this work in the second term of their attendance in the Summer Session. (See courses numbered 300 or above.)

### FIRST TERM

S51. HISTORICAL BACKGROUND OF THE WORLD TODAY 1500-1871.—The central fact of the expansion of Europe underlies the content of the course. The chief themes are: the contest between liberty and authority in the modern



state, changing economic theory and organization, and the problems of peace and war among the states, including the Western infiltration of Asia, Latin America, and Africa, and the rise of the United States as a world power. 2.101. 9:20-10:40. 3 s.h.

MR. HAMILTON

S91. THE DEVELOPMENT OF AMERICAN DEMOCRACY TO 1865.—This course is a study of trends vital to an understanding of the United States today. The main theme is the development of American democracy. Problems of foreign policy, the growth of capitalism, political practices, social behavior, and conflicting ideals are considered in relation to this main theme. 2.02. 7:40-9:00. 3 s.h.

MR. WATSON

S105. ENGLISH CONSTITUTIONAL HISTORY.—A history of England with emphasis on constitutional aspects. This course is required of students in the Pre-Legal Group in the Junior or Senior year. 2.101. 7:40-9:00. 3 s.h.

MR. HAMILTON

S113. AMERICA IN THE TWENTIETH CENTURY.—An historical study of political, economic, and social problems of twentieth-century United States. Emphasis is placed on reform movements from the Muckrakers through the New Deal, the emergence of the United States as a world power, and conflicting ideas and ideologies. 2.02. 9:20-10:40. 3 s.h.

MR. WATSON

S204. THE UNITED STATES, 1850-1900.—The rise of sectionalism, secession, war-time problems of the Union and Confederacy, political and economic adjustments of Reconstruction, the status of the Negro, the New South, problems of capital and labor, the agrarian revolt, political parties and reform, the Spanish-American War. 2.01. 11:00-12:20. 3 s.h.

MR. WOODY

S217. EUROPE SINCE 1870.—International relations since the Franco-German War is the chief subject of study in this course; special emphasis is placed upon the underlying economic and political influences. 2.101. 11:00-12:20. 3 s.h.

MR. CARROLL

S231. THE HISPANIC COLONIES OF THE NEW WORLD.—The development of the Iberian states as colonizing powers, the work of the conquerors, the Spanish colonial policy and system, their influences and results, native races, the international contest for supremacy, and the decay of Spanish power in America and the Philippines. 2.102. 9:20-10:40. 3 s.h.

MR. LANNING

S315. SEMINAR IN SOUTHERN HISTORY.—Selected topics in the development of the Southern region, chosen year to year in different periods in its development. 2.01. 1:40-3:00. 3 s.h.

MR. WOODY

S317. SEMINAR IN MODERN EUROPEAN HISTORY.—Directed research in problems relating to the history of Europe in the nineteenth and twentieth centuries. 2.101. 1:40-3:00. 3 s.h.

MR. CARROLL

S321. SEMINAR IN HISPANIC-AMERICA AND INTER-AMERICAN RELATIONS. 504 Library. 1:40-3:00. 3 s.h.

MR. LANNING

## SECOND TERM

S52. HISTORICAL BACKGROUND OF THE WORLD TODAY 1871-1940.—A continuation of History S51. 2.02. 7:40-9:00. 3 s.h.

MR. ROPP

S235. WAR IN THE MODERN WORLD.—This course, which deals with military and naval history since Napoleon, is concerned with the relations between war and modern political, economic, and social conditions rather than with the details of battles. Special attention is given to the development of British and American military methods and to events in the American Civil War and the two World Wars. 2.02. 9:20-10:40. 3 s.h.

MR. ROPP

S237. SOCIAL AND INTELLECTUAL DEVELOPMENT OF THE OLD SOUTH.—Consideration will be given to conditions in the South in respect to slavery, agriculture, manufacturing, transportation, education, religion, science, and literature. 2.101. 11:00-12:20. 3 s.h.

MR. SYDNOR

S315. SEMINAR IN SOUTHERN HISTORY.—Selected topics in the development of the Southern region, chosen year to year in different periods in its development. 2.101. 1:40-3:00. 3 s.h.

MR. SYDNOR



## LATIN AND ROMAN STUDIES

PROFESSOR ROBERT S. ROGERS, CHAIRMAN—204 CARR (EAST CAMPUS)

## FIRST TERM

3111. ROMAN LITERATURE IN ENGLISH TRANSLATION.—Selected readings of Latin literature in English translation with emphasis on the drama, lyric poetry, and the varied contributions of Cicero to literature. 2.205. 9:20-10:40. 3 s.h. Mr. ROSE

## MATHEMATICS

PROFESSOR J. J. GERGEN, CHAIRMAN—220 PHYSICS BUILDING (WEST CAMPUS);

PROFESSOR J. H. ROBERTS, DIRECTOR OF GRADUATE STUDIES—  
219 PHYSICS BUILDING (WEST CAMPUS)

For admission to candidacy for the degree of Master of Arts with major in Mathematics, a student must have a minimum of twenty-four semester hours credit for course work in Mathematics and related fields. This course work must be approved by the Department through the Director of Graduate Studies. It must include differential and integral calculus and an additional six semester hours of work in mathematical courses of at least Junior level.

To obtain the Master of Arts degree with major in Mathematics by Summer Session work, a candidate must complete twenty-one semester hours of course work in Mathematics, six semester hours of course work in a minor field, and a thesis in Mathematics. The course work must be in courses numbered not less than 200. All work must be approved by the Department through the Director of Graduate Studies. To help students meet the thesis requirement, the Department offers Thesis Seminar, S389X, in which supervision of thesis writing is available.

Each student should, as early as possible in his graduate work, discuss his program with the Director of Graduate Studies or his representative.

## FIRST TERM

S5. COLLEGE ALGEBRA. 2.105. 7:40-9:00. 3 s.h. Mr. HICKSON

S6. PLANE TRIGONOMETRY. 2.105. 9:20-10:40. 3 s.h. Mr. RANKIN

S53. CALCULUS III.—Introduction to solid analytic geometry, partial differentiation, multiple integration, series, introduction to differential equations. Prerequisite: Mathematics 52. 49.216. 11:00-12:20. 3 s.h. Mr. DRESSEL

S205. ALGEBRA FROM AN ADVANCED STANDPOINT.—Real and complex numbers, divisibility of integers, scales of notation, Diophantine equations, continued fractions, summation of series, binomial theorem, interest and annuities. This course is designed for teachers of secondary school algebra. Prerequisite: Calculus. 49.205. 11:00-12:20. 3 s.h. Mr. GERGEN

S207. SOLID GEOMETRY AND SPHERICAL TRIGONOMETRY FROM AN ADVANCED STANDPOINT.—Postulates for three-dimensional Euclidean geometry, the geometry of the sphere studied as a two-dimensional space so as to emphasize its analogies and contrasts with the Euclidean plane, an outline of spherical trigonometry along both constructional and computational lines. Applications to mapping, navigation and astronomy. This course should prove useful to teachers of geometry and trigonometry whether or not they have had or are teaching elementary courses in the subjects of the title. Prerequisite: Calculus. 49.216. 9:20-10:40. 3 s.h. Mr. THOMAS

S235. ABSTRACT ALGEBRA I.—Groups, fields, rings. Prerequisite: Calculus. 49.216. 7:40-9:00. 3 s.h. Mr. THOMAS

S241. INTEGRAL EQUATIONS.—Volterra and Fredholm integral equations, Hilbert-Schmidt theory, applications to mathematical physics. 49.205. 9:20-10:40. 3 s.h. Mr. GERGEN

S389X. THESIS SEMINAR.—Supervision of individual theses in algebra, analysis and geometry. Students should consult the Director of Graduate Studies or his representative before registering. Thesis credit only. Hours to be arranged.

Mr. DRESSEL

## SECOND TERM

S50. PLANE ANALYTIC GEOMETRY.—Prerequisite: Mathematics S5 and S6  
2.105. 7:40-9:00. 3 s.h. MR. ELLIOTT

S51. CALCULUS I.—Differentiation of elementary functions, curve tracing, maxima and minima, motion. Must be preceded or accompanied by Mathematics S50. 2.105. 9:20-10:40. 3 s.h. MR. ELLIOTT

S236. ABSTRACT ALGEBRA II.—Matrices, quadratic and bilinear forms, valuations. Prerequisite: Calculus. 49.216. 7:40-9:00. 3 s.h. MR. CARLITZ

S275. PROBABILITY.—Combinatory analysis, mean values, Bernoulli's theorem, probability integral. Prerequisite: Calculus. 49.216. 9:20-10:40. 3 s.h. MR. CARLITZ

## SOLID GEOMETRY

September 1 through September 12. 2.105. 8:30-11:30. 0 s.h. MR. ELLIOTT

## MEDICAL MYCOLOGY

A month's course in Medical Mycology, under the direction of Dr. Norman F. Conant, is to be offered at Duke University School of Medicine and Duke Hospital, July 2-28, 1951. The course will be offered every day in the week, except Sunday, and has been designed to insure a working knowledge of the human pathogenic fungi within the time allotted.

Emphasis will be placed on the practical aspects of the laboratory as an aid in helping establish a diagnosis of fungus infection. Insofar as possible and as patients become available, methods of collecting materials in the clinic for study and culture will be stressed. Work with patients, clinical material, cultures and laboratory animals will serve as a basis for this course. Also, an opportunity to study pathologic material, gross and microscopic, will be given those whose previous training would allow them to obtain the greatest benefit from a study of such material.

The number of applicants for the course will be limited and the applications will be considered in the order in which they are received. An attempt will be made, however, to select students on the basis of their previous training and their stated need for this type of work.

A fee of \$50.00 will be charged for this course, upon the completion of which a suitable certificate will be awarded. Please direct inquiries to Dr. Norman F. Conant, Professor of Mycology, Duke University School of Medicine, Durham, North Carolina.

## PHILOSOPHY

PROFESSOR GLENN NEGLEY, CHAIRMAN—3-1 WEST DUKE BUILDING (EAST CAMPUS);  
PROFESSOR R. L. PATTERSON, DIRECTOR OF GRADUATE STUDIES—  
3-1 WEST DUKE BUILDING (EAST CAMPUS)

## FIRST TERM

S48. LOGIC.—An introduction to critical thinking; the analysis of arguments with emphasis on inductive reasoning, valid forms, and fallacies in argument. Practice in analysis. 3.101. 9:20-10:40. 3 s.h. MR. WELSH

S91. INTRODUCTION TO PHILOSOPHY.—This course is intended to acquaint the student with the nature of philosophical problems. 3.101. 11:00-12:20. 3 s.h.  
MR. WELSH

## SECOND TERM

S48. LOGIC.—For description, see First Term. 3.101. 9:20-10:40. 3 s.h.  
MR. DUNHAM

S94. HISTORY OF PHILOSOPHY: MODERN.—A study of the major philosophers of the period with special reference to the continuity of their thought. 3.101. 11:00-12:20. 3 s.h.  
MR. DUNHAM

## PHYSICS

PROFESSOR WALTER M. NIELSEN, CHAIRMAN AND DIRECTOR OF GRADUATE STUDIES—  
119 PHYSICS BUILDING (WEST CAMPUS)

### FIRST TERM

S51. GENERAL PHYSICS.—This course treats the basic principle of general physics in a more quantitative manner than Physics 1-2. It is designed for sophomores and juniors and meets in a thorough way the physics requirements for entrance into the study of either medicine or engineering, and is well suited for the general student. A limited number of freshmen who present physics for entrance and who have completed the required mathematics may be admitted by permission of the instructor. (Not open to students who have completed Physics 1-2.) Prerequisite: Mathematics 2-5 or equivalent. Lecture and recitation daily, 8:30-9:50 and 10:00-11:30; laboratory three days per week, 2:00-5:00. June 18-July 21. 49.113. 5 s.h.  
MR. CARPENTER

S175. INTERMEDIATE PHYSICS—OPTICS.—The elements of geometrical and physical optics. Three recitations and one three-hour laboratory per week. Prerequisites: Physics 125 and 126 or equivalent work approved by instructor, and differential and integral calculus. 49.120. 9:20-10:40. 4 s.h. June 25-July 21.

S353X. THESIS SEMINAR.—Students who are properly qualified may carry on research work under direction. Credits and hours to be arranged. STAFF

### SECOND TERM

S52. GENERAL PHYSICS.—A continuation of Physics S51. Prerequisite: Physics S51. Lecture and recitation daily, 8:30-9:50 and 10:00-11:30; laboratory three days per week, 2:00-5:00. July 21 to August 24. 49.113. 5 s.h.  
MR. CARPENTER

S176. INTERMEDIATE PHYSICS—THERMODYNAMICS AND KINETIC THEORY.—The elements of thermodynamics and kinetic theory and elementary statistical mechanics. Three recitations per week. Prerequisites: Physics 125 or equivalent work approved by the instructor, and differential and integral calculus. 49.120. 9:20-10:40. 3 s.h. July 21-August 18.

S353X. THESIS SEMINAR.—For description, see First Term. STAFF

## POLITICAL SCIENCE

PROFESSOR ROBERT S. RANKIN, CHAIRMAN—308 LIBRARY (WEST CAMPUS); PROFESSOR  
R. R. WILSON, DIRECTOR OF GRADUATE STUDIES—311 LIBRARY (WEST CAMPUS)

### FIRST TERM

S61. AMERICAN GOVERNMENT AND POLITICS.—A study of the American political system, emphasizing the organization and functioning of the national government. 10.108. 11:00-12:20. 3 s.h.  
MR. RICHARDS

S141. PUBLIC REGULATION.—An introduction to the administrative process, emphasizing the nature, types, and techniques of public activity; and the methods and problems of protecting the public interest. 10.108. 9:20-10:40. 3 s.h.  
MR. RICHARDS

S209. STATE AND LOCAL GOVERNMENT IN THE UNITED STATES.—A study of the historical development of state and local governments, their present organization, their relation to each other and to the federal government. 10.110. 7:40-9:00. 3 s.h. MR. RANKIN

S230. AMERICAN POLITICAL INSTITUTIONS.—A study of the formation and development of institutions of the national government in the United States, with historical and analytical treatment. 10.110. 11:00-12:20. 3 s.h. MR. RANKIN

## SECOND TERM

S62. AMERICAN GOVERNMENT AND POLITICS.—Continuation of S61. For description, see First Term. 10.108. 7:40-9:00. 3 s.h. MR. SIMPSON

S125. AMERICAN POLITICAL PARTIES AND PRACTICAL POLITICS.—A study of the historical development, organization, and methods of political parties in the United States. 10.108. 11:00-12:20. 3 s.h. MR. SIMPSON

S151. LATIN-AMERICAN POLITICAL INSTITUTIONS.—A study of Latin-American governments during the colonial period. 10.110. 9:20-10:40. 3 s.h. MR. TRAVIS

S221. INTERNATIONAL PUBLIC ORGANIZATION.—A study of the structure and functioning of the United Nations System and of selected organizations outside that system. 10.110. 7:40-9:00. 3 s.h. MR. TRAVIS

## PSYCHOLOGY

PROFESSOR ELIOT H. RODNICK, CHAIRMAN—201 BIVENS BUILDING (EAST CAMPUS);  
PROFESSOR KARL ZENER, DIRECTOR OF GRADUATE STUDIES—205 PSYCHOLOGICAL  
LABORATORY BUILDING (EAST CAMPUS)

For admission to candidacy for a Master's degree in psychology, the student must present a total of twelve semester hours in psychology beyond the introductory course, at least six semester hours of which must be taken in Senior-Graduate courses. In addition he must have credit for Zoology 1-2 or equivalent.

## FIRST TERM

S91-92. GENERAL PSYCHOLOGY.—An introduction to the facts, principles, and problems of normal adult psychology through a study of psychological methods as applied to motivation, emotions, perceptions, sensation, thinking, memory, learning, individual differences and personality. The course is a prerequisite for all other courses in psychology. 2.201/G. 9:20-10:40 and 1:40-3:00. 6 s.h. MR. GARMEZY

S215. DEVELOPMENTAL PSYCHOLOGY.—Hypothetico-deductive method applied to the theory of personality structure and the changes it undergoes in development; learning, conflict, character, intelligence, development crises, etc.; evaluation of researches on personality dynamics; lectures, readings, motion picture demonstration. 3.106. 9:20-10:40. 3 s.h. MR. ADAMS

S303. RESEARCH.—Students who are properly qualified may carry on research work under direction. Hours to be arranged. 3 s.h. MR. RODNICK

S308. SEMINAR IN PSYCHOPATHOLOGY.—3.106. 1:40-3:00. 3 s.h.

MR. RODNICK

## SECOND TERM

S204. MOTIVATION AND LEARNING.—Psychological and biological conditions of the operation, modification, organization of motivation systems. 2.201/G. 7:40-9:00. 3 s.h. MR. ZENER

S304. RESEARCH.—Students who are properly qualified may carry on research work under direction. Hours to be arranged. 3 s.h. MR. ZENER



## RELIGION

PROFESSOR JAMES CANNON III, ACTING DEAN OF THE DIVINITY SCHOOL—110 DIVINITY SCHOOL (WEST CAMPUS) ; PROFESSOR H. E. MYERS, CHAIRMAN OF THE DEPARTMENT OF RELIGION—204 DIVINITY SCHOOL (WEST CAMPUS) ; PROFESSOR H. SHELTON SMITH, DIRECTOR OF GRADUATE STUDIES—302 DIVINITY SCHOOL (WEST CAMPUS)

## FIRST TERM

S51. THE HISTORY OF THE HEBREW PEOPLE.—A study of the Hebrew people that gives attention to their political history, their religious and social institutions, their literary development, with special reference to their contributions of civilization. 3.08. 7:40-9:00. 3 s.h. MR. SALES

S52. NEW TESTAMENT LIFE AND LITERATURE.—A study of the literature of the New Testament, its historical background, and its religious value. 3.08. 9:20-10:40. 3 s.h. MR. SALES

S102. THE CHRISTIAN CHURCH IN THE SOCIAL ORDER.—This course will deal with the Christian Church in its service to society and its relation to other social institutions. 3.08. 11:00-12:20. 3 s.h. MR. ECKARDT

S104. THE HISTORY AND RELIGION OF THE JEWS TO THE ROMAN PERIOD.—The work in this course is based largely on exilic and post-exilic prophecy, the Wisdom Literature, and the earlier apocalyptic and apocryphal literature. 3.209. 7:40-9:00. 3 s.h. MR. ECKARDT

S114. CHRISTIAN ETHICS.—The application of Christian ethics to life in modern society with particular emphasis on the ethical problems of the typical American community. For Divinity School students and college seniors. 3.109. 7:40-9:00. 3 s.h. MR. BEACH

S198. THE HERITAGE OF THE REFORMATION.—An historical consideration of the Protestant tradition in relation to the life and thought of the modern church. For Divinity School students and college seniors. 3.109. 1:40-3:00. 3 s.h. MR. SCHAEFER

S312. (ADVANCED) NEW TESTAMENT THEOLOGY.—An examination of the central aspects of New Testament Theology. For Divinity School students and graduate students. 3.109. 9:20-10:40. 3 s.h. MR. DAVIES

S393. THE CHRISTIAN INTERPRETATION OF HISTORY.—A comparative examination of the chief secular and Christian theories of history current in Western thought. For Divinity School students. 3.109. 11:00-12:20. 3 s.h. MR. BEACH

## SECOND TERM

S51. THE HISTORY OF THE HEBREW PEOPLE.—For description, see First Term. 3.08. 9:20-10:40. 3 s.h. MR. PERRY

S52. NEW TESTAMENT LIFE AND LITERATURE.—For description, see First Term. 3.08. 7:40-9:00. 3 s.h. MR. PERRY

S181. THE NATURE AND EARLY DEVELOPMENT OF RELIGION.—Introduction to the early history of religion, the beliefs and practices of the more primitive peoples, and the religious life of the ancient world. Not open for credit to students who take Religion 183. 3.209. 9:20-10:40. 3 s.h. MR. CANNON

S182. LIVING RELIGIONS OF THE WORLD.—A survey of the religious systems of India, China, and Japan, followed by a study of Judaism, Mohammedanism, and Christianity, the object being to trace the historical development of each religion. Not open for credit to students who take Religion 183. 3.209. 11:00-12:20. 3 s.h. MR. CANNON

S197. CULTURAL HISTORY OF PALESTINE.—A study of significant contributions to civilization made in ancient, mediaeval and modern Palestine with special reference to the three religions, Judaism, Christianity, and Islam. For Divinity School students and college seniors. 3.109. 1:40-3:00. 3 s.h. MR. STINESPRING



S199. THE AMERICAN SOCIAL GOSPEL.—The development of Protestant social thought and action in America since 1865. For Divinity School students and college seniors. 3.109. 7:40-9:00. 3 s.h. MR. SMITH

S298. MODERN AMERICAN CHRISTOLOGY.—A study of liberal conceptions of Jesus from William E. Channing to Walter Rauschenbusch. For Divinity School students and graduate students. 3.109. 11:00-12:20. 3 s.h. MR. SMITH

S310. OLD TESTAMENT PROPHECY.—A study of the ethical and religious teaching of the Old Testament with special reference to the prophets of the eighth century B. C. For Divinity School students and graduate students. 3.109. 9:20-10:40. 3 s.h. MR. STINESPRING

## SOCIOLOGY

PROFESSOR HOWARD E. JENSEN, CHAIRMAN—215E SOCIAL SCIENCE BUILDING (WEST CAMPUS); PROFESSOR HORNFELL HART, DIRECTOR OF GRADUATE STUDIES—215D SOCIAL SCIENCE BUILDING (WEST CAMPUS)

### FIRST TERM

S101. GENERAL SOCIOLOGY.—An introduction to the scientific study of social life, its origin, evolution, and organization as illustrated by the study of a number of concrete social problems. 10.215. 7:40-9:00. 3 s.h. MRS. WHITRIDGE

(Courses 91-92, or 101, or 111, or 112 is prerequisite to all other courses in the Department.)

S158. SOCIOLOGY OF THE PROFESSIONS AND OCCUPATIONS.—Analysis of the professional and occupational structure of the American economy; shifts and trends in occupations and professions for men, women and minority groups; social and economic characteristics of occupational and professional groups; factors in the selection of a profession or occupation; sources of information about occupations and professions; measurements of aptitudes, abilities and skills; employer-employee relationships. 10.108. 7:40-9:00. 3 s.h. MR. SCETTLE

S191. PRINCIPLES OF SOCIAL CASE INVESTIGATION.—A non-professional course designed to acquaint the student with the basic research techniques employed in the case study of the interrelationships of personality and culture in various fields of sociological and anthropological interest. 10.215. 9:20-10:40. 3 s.h. MRS. WHITRIDGE

S246. PUBLIC OPINION AND PROPAGANDA.—Nature and development of public opinion; relation to attitudes, biases, stereotypes and controversial issues; role of leaders, pressure groups and minority groups; use of radio, press, motion picture and graphic arts; propaganda and censorship; measurements of public opinion. 10.215. 11:00-12:20. 3 s.h. MR. SCETTLE

S250. MARRIAGE AND THE FAMILY.—An analysis of contemporary marriage and family experiences with emphasis on its functions, problems, resources, and values. Not open to students who have received credit for Sociology 299 or Religion 170. 10.215. 1:40-3:00. 3 s.h. MR. HART

S286. SOCIAL ETHICS.—A study of sociological fundamentals underlying ethics, including the controversy between materialistic and idealistic social thinkers, the nature of personalities and of social organization, the nature of social values, types of social interaction and their effects upon general social values, underlying principles and facts of social change, and the bearings of all these upon certain social problems. 10.110. 9:20-10:40. 3 s.h. MR. HART

### SECOND TERM

S235. URBAN SOCIOLOGY.—A study of the city and civilization, the newspaper, the social survey, the slum and housing, neighborhoods and natural areas, urban institutions, urban problems, and city planning. 10.215. 11:00-12:20. 3 s.h. MR. THOMPSON

S238. RACE AND CULTURE.—A study of the nature of race and of the relationships and problems of race. 10.215. 7:40-9:00. 3 s.h. MR. THOMPSON

## SPANISH

PROFESSOR BRADY R. JORDAN, CHAIRMAN OF DEPARTMENT OF ROMANCE LANGUAGES AND  
DIRECTOR OF GRADUATE STUDIES—214 CARR BUILDING (EAST CAMPUS) ; ASSOCIATE  
PROFESSOR GIFFORD DAVIS, DIRECTOR OF THE SCHOOL OF SPANISH STUDIES—  
213 CARR BUILDING (EAST CAMPUS)

### THE SCHOOL OF SPANISH STUDIES

#### FIRST TERM

Students enrolling in these Spanish courses should read carefully the statement on the School of Spanish Studies, page 30.

S1. BEGINNING SPANISH.—Pronunciation; essentials of grammar; dictation exercises; early reading of simple prose; vocabulary lists; consistent use of the language as a means of instruction and as a means of attaining a basic aural command. June 12-July 2. B.117. 7:40-9:00 and 11:00-12:20. 3 s.h. MR. FEIN

S2. BEGINNING SPANISH.—Continuation of S1. July 3-July 21. B.117. 7:40-9:00 and 11:00-12:20. 3 s.h. MR. FEIN

S3. INTERMEDIATE SPANISH.—A systematic review of verbs; drill on high frequency idioms; review of special grammatical difficulties; dictation exercises and oral drill; constant use of the language as medium of instruction; reading of graduate selection of modern prose. B.113. 7:40-9:00. 3 s.h. MR. DAVIS

S4. INTERMEDIATE SPANISH.—Reading of modern fiction with emphasis on achievement of ability to read without translation; continued oral-aural exercises; dictation; idiom study; grammar review as necessary. B.113. 11:00-12:20. 3 s.h. MR. TORRE

S65. INTRODUCTION TO MODERN SPANISH LITERATURE.—Study of representative masterpieces of the modern novel; brief lectures in Spanish; collateral reading of critical commentaries. B.119. 7:40-9:00. 3 s.h. MR. TORRE

S68. INTRODUCTION TO SPANISH-AMERICAN LITERATURE.—Study of typical works in the field of the novel and lyric, chiefly of the modern period; brief lectures on literary, social and cultural backgrounds and tendencies; collateral readings and reports. B.119. 11:00-12:20. 3 s.h. MR. AMOR Y VAZQUEZ

S174. PHONETICS AND DICTION.—The aim of this course is two-fold: to improve the student's pronunciation and to increase his power of oral expression. The elements of Spanish phonetics will be presented in conjunction with practical exercises. Practice in oral expression will be afforded by class discussion of selected topics. B.118. 9:20-10:40. 3 s.h. MR. PREDMORE

S256. CONTEMPORARY SPANISH-AMERICAN LITERATURE (1910-1950).—A brief panorama of the literary production of the last two Spanish-American generations. B.119. 9:20-10:40. 3 s.h. MR. PORTUONDO

S260. ADVANCED COMPOSITION AND SYNTAX.—Study of fundamental difficulties in the language; practice in writing idiomatic Spanish; exercises in free composition. For students who have a satisfactory command of Spanish grammar and fair conversational ability. B.118. 11:00-12:20. 3 s.h. MR. PORTUONDO

S275. CONTEMPORARY SPANISH LITERATURE: ESSAY AND LYRIC POETRY.—A study of the revision of national values and literary expression in the twentieth century with particular reference to the crisis of 1898 and to the enrichment of the Spanish tradition through extrapeninsular influences. B.118. 7:40-9:00. 3 s.h. MR. PREDMORE

## ZOOLOGY

PROFESSOR IRVING E. GRAY, CHAIRMAN—218 BIOLOGY BUILDING (WEST CAMPUS);  
 PROFESSOR KARL M. WILBUR, DIRECTOR OF GRADUATE STUDIES—  
 328 BIOLOGY BUILDING (WEST CAMPUS)

For admission to candidacy for a Master's degree in Zoology, a student should have completed an undergraduate major in Zoology (courses in General Science and Botany are not counted as a part of a Zoology major). This normally amounts to about twenty-four semester hours, which should be distributed among the various fields of Zoology, and must include Vertebrate Zoology or Comparative Anatomy, Physiology, and Embryology, passed with creditable grades. A candidate should also have completed at least one year of Chemistry. Work for the degree will require eighteen hours in advanced courses in Zoology, and six hours in another department for a minor, in addition to a thesis. Before registration for a degree, students should confer with the Director of Graduate Studies for the Department. Students not candidates for a degree may take courses offered, if they have necessary prerequisites; but may not count them toward a degree until an undergraduate major has been completed.

## FIRST TERM (on Duke Campus)

S1. GENERAL ZOOLOGY.—A brief survey of the animal kingdom. Lectures, recitations and laboratory daily, 8:00-12:00, 2:00-4:00. June 25-July 21. 9.120, 9.121. 4 s.h. MRS. HUNTER

S53. COMPARATIVE VERTEBRATE ANATOMY.—The anatomy and evolution of the organ systems of vertebrates. Prerequisite: Zoology 2. Lectures, recitations and laboratory daily, 8:00-12:00, 2:00-4:00. June 25-July 21. 9.117, 9.016. 4 s.h. MR. ROBERTS

## FIRST TERM (Marine Laboratory at Beaufort, North Carolina)

S203. MARINE ECOLOGY.—A study of marine animals in relation to environment. Consideration of environmental factors, succession, rhythms, communities, intraspecific and interspecific relations, productivity, conservation, problems, etc., concerned with animal life in the ocean. Lectures, reviews, conferences, field and laboratory work. 6 s.h. MR. GRAY

S212. POPULATIONS.—The analysis and interpretation of fluctuations in populations of commercially important aquatic animals with emphasis on statistical treatment of data. A study of population growth, mortality rates, indices of abundance, evaluation and correlation of environmental factors, problems of overfishing and optimum catch. 6 s.h.

S353. RESEARCH.—Hours to be arranged. 2 to 6 s.h.

MESSRS. GRAY AND BOOKHOUT

## SECOND TERM (on Duke Campus)

S2. ANIMAL BIOLOGY.—The principles of biology as applied to animals. Prerequisite: Zoology 1. Lectures, recitations and laboratory daily, 8:00-12:00, 2:00-4:00. July 21-August 18. 9.120, 9.121. 4 s.h. MR. WHARTON

S92. GENERAL EMBRYOLOGY.—The fundamental principles of embryology as illustrated in frog, chick, and mammal. Prerequisites: Zoology 53. Lectures, recitations and laboratory daily, 8:00-12:00, 2:00-4:00. July 21-August 18. 9.117, 9.016. 4 s.h. MR. HORN

S231. ACAROLOGY.—An introductory study of the Acarina or mites and ticks with special emphasis on those of economic and medical importance. Lectures, recitations and laboratory daily, 8:00-12:00, 2:00-4:00. August 20-September 7. 9.110. 3 s.h. MR. WHARTON

## SECOND TERM (Marine Laboratory at Beaufort, North Carolina)

S274. MARINE INVERTEBRATE ZOOLOGY.—A study of invertebrate animals that occur in the Beaufort region. A number of field trips will be made to a variety of habitats to study, collect, and classify animals in their natural environments. The structure and habits of living invertebrates as well as their behavior under certain experimental conditions will be studied in the laboratory. 6 s.h.

MR. REID

S278. INVERTEBRATE EMBRYOLOGY.—Lectures, readings and laboratory work dealing with rearing, life history and development of invertebrates. Attention will be given to larvae occurring in plankton. Prerequisite: Zoology 92. 6 s.h.

MR. BOOKHOUT

S353. RESEARCH.—Hours to be arranged. 2 to 6 s.h.

MESSRS. GRAY AND BOOKHOUT

## DIRECTIONS TO SUMMER SESSION APPLICANTS

All applicants for Summer Session courses who are not now in residence at Duke University must fill out accurately and in detail the form below and return it to the Director of the Summer Session. Preference in enrollment will be given to persons returning the form promptly, but a place in a particular course cannot be assured until all fees are paid. Undergraduates or graduates who are enrolled in a university or college other than Duke University and who are seeking to transfer summer session credits to the college in which they are matriculated should request a course approval form to be certified by their dean or registrar. Persons applying for admission to the Graduate School of Duke University should write the Dean of the Graduate School for the necessary forms.

No. \_\_\_\_\_ Approved \_\_\_\_\_ Date.....

# APPLICATION FOR ENROLLMENT IN THE DUKE UNIVERSITY SUMMER SESSION

Mr., Mrs., Miss.....  
(Please print)

Street address, Rural route, or P. O. Box.....

Post Office.....State.....

Nationality..... Race.....

Please reserve a place for me in the following courses listed in the Summer Session Bulletin.

Department	No. of Course	Title of Course
------------	---------------	-----------------

Name and address of High School from which you graduated.....

Have you attended a college? Yes..... No.....



In what school or college of Duke University are you seeking to enroll (check one) :

- Undergraduate credits*
- ☐ Trinity College (men)
  - ☐ The Woman's College
  - ☐ College of Engineering
  - ☐ Special or unclassified
  - ☐ Credits for transfer

- Graduate credits*
- ☐ Graduate School, Arts and Sciences
  - ☐ Divinity School
  - ☐ School of Forestry
  - ☐ Special or unclassified
  - ☐ Credits for transfer

Have you applied for admission to the Graduate School?.....

Are you at present a college student?..... If so, where?.....

..... What class?.....

Are you a full-time teacher?.....

Name and address of school.....

Teaching position.....

Total number years teaching experience.....

Will your fees be paid by (a) yourself.....

(b) Veterans' Administration.....

Have you attended previous Summer Sessions at Duke: Yes.....;

Years.....; No.....

DUKE UNIVERSITY SUMMER SESSION  
APPLICATION FOR DORMITORY ROOM

Application for room reservations and all correspondence concerning such reservations should be addressed to: Housing Bureau, Duke Station, Durham, North Carolina.

Room assignment will be made only upon the applicant's admission to the Summer Session, as certified by the Summer Session Office, and upon payment of full room rent. Applicants who expect to be in residence for longer than six weeks are urged to make advance reservation for the entire period and thus avoid, to the extent that housing arrangements make it practicable, the necessity of moving from one room to another during the full term of residence.

Rental fees . . . etc. These fees are refundable provided the applicant cancels his room reservation at least fifteen (15) days before the opening of the session for which he is applying for admission.

If the applicant requests a double room but gives no preference of roommate, Bureau officials will try to assign a roommate of seemingly congenial interests. It is understood, however, that the responsibility for getting and keeping a roommate rests with the applicant; otherwise, it will be necessary for him to move to a single room or to make the indicated financial adjustment.

-----

Name..... Date.....

Present address.....

Permanent address.....

(Address to which mail always will be forwarded)

Present position.....

Address.....

Academic degrees earned.....

(College conferring)

(Degree)

(Date conferred)

If you are in college now, give name of institution and your class:

-----

(Name of college)

(Class)

Department of your major subject.....

Will you be writing a thesis this summer? Yes..... No.....

Date of your expected arrival at Duke for the Summer Session.....

Number of weeks you expect to remain.....

Type of room desired: Single..... Double.....

-----

Name of preferred roommate, if any.....

Address.....









VOLUME 23

February, 1951

NUMBER 4-D

# BULLETIN OF DUKE UNIVERSITY

---

*The School of Spanish Studies*



SAINT JOHN'S EVE, 1950

TENTH ANNUAL SESSION, 1951

JUNE 12-JULY 21

Published by Duke University monthly except in July, August, September, and December. Entered as second-class matter March 25, 1929, at the Post Office of Durham, North Carolina, under the Act of August 24, 1912.

## Calendar of the School of Spanish Studies

- June 11 Monday—*Residencia* opens 2:00 p.m.  
12 Tuesday—Registration at Field House, West Campus.  
13 Wednesday, 7:40 a.m.—Instruction begins.  
15 Friday, 8:00 p.m.—Formal Reception at *Residencia*.  
16 Saturday—not a holiday. All classes meet.  
22 Friday, 7:00 p.m.—*Fiesta de San Juan*.
- July 2 Monday—Mid-term examinations. Final examination for Spanish S1.  
3 Tuesday—Instruction in Spanish S2 begins.  
4 All classes meet. *Fiesta nacional*.  
13 Friday, 7:00 p.m.—*Fiesta de la Sandía*.  
19 Thursday—Farewell dinner party.  
20 Friday—Final examinations begin.  
21 Saturday—Final examinations end; close of session.

Classes do not meet on Saturdays except on June 16.



#### FACULTY OF 1950 SESSION

*Left to right:* SR. GUSTAVO R. HERNÁNDEZ, SR. RICHARD L. PREDMORE,  
SR. JOSÉ A. BALSEIRO, SR. ELÍAS TORRE, SR. MARIO LLERENA,  
SR. GIFFORD DAVIS

#### ADMINISTRATIVE AND INSTRUCTIONAL STAFF

ARTHUR HOLLIS EDENS, B.Ph., A.M., M.P.A., Ph.D., LL.D.  
President of the University

PAUL MAGNUS GROSS, B.S., A.M., Ph.D.  
Vice-President in the Educational Division

PAUL HIBBERT CLYDE, A.B., A.M., Ph.D.  
Director of the Summer Session

JOHN WINDER CARR, JR., A.B., A.M., Ph.D.  
Assistant Director of the Summer Session

BRADY RIMBEY JORDAN, Litt.B., Ph.D.  
Chairman and Director of Graduate Studies of the Department  
of Romance Languages

GIFFORD DAVIS, A.B., A.M., Ph.D.  
Director of the School of Spanish Studies

JOSÉ ANTONIO PORTUONDO, Bach. en C. y L., Dr. en F. y L.  
Visiting Assistant Professor of Spanish

RICHARD LIONEL PREDMORE, B.A., M.A., D.M.L.  
Professor of Spanish

JOHN MORTON FEIN, A.B., A.M., Ph.D.  
Assistant Professor of Spanish

JOSÉ AMOR Y VÁZQUEZ, Dr. en Leyes  
Visiting Instructor in Spanish

ELÍAS TORRE, Bach. de Instituto, Bach. Universitario, M.A.  
Visiting Instructor in Spanish

---

JEANNE M. CHEW, A.B., M.A.  
Social Director and Counsellor

CATHERINE P. PREDMORE  
Assistant to Social Director and Counsellor

---

### **Assistants to Students**

GLORIA DE LA VEGA, Dra. en Ciencias  
Native of Cuba, Instructor, University of Miami, Florida

BERTHA V. DE PORTUONDO  
Native of Cuba

ELÍAS R. TORRE  
Native of Spain

EMILIA RICO DE TORRE  
Native of Spain

## THE SCHOOL OF SPANISH STUDIES

The School of Spanish Studies is intended to offer to students and teachers an opportunity for intensive training in the knowledge and use of the Spanish language. It is designed to provide a basic orientation in the literature and cultural background of the Hispanic world. The work is intended for the following groups of persons:

1. High-school and college teachers who wish to refresh their active use of Spanish or to pursue advanced courses.
2. Prospective teachers of Spanish and specialists in other fields (business, government service, history, etc.) whose work may require a knowledge of Spanish.
3. Graduate and undergraduate students with a major or minor in Spanish.
4. Undergraduates who plan to fulfill their requirement in foreign language by courses in Spanish and who desire more than a reading knowledge of the language.
5. First term freshmen, accepted by Duke University or by an accredited college or university.

### THE PROGRAM

The activities of the School of Spanish Studies are conducted under conditions of segregation. A primary objective is to require the active use of the Spanish language in the *Residencia* and the *Comedor* as well as in the classroom. Students enrolled in the School are expected to learn Spanish by hearing and speaking the language. All living arrangements are made with the idea of facilitating and requiring the use of Spanish at all times. Students are asked to pledge themselves to the strict observance of this practice.

Courses are available on both the undergraduate and the graduate level. All courses number 200 or above carry graduate credit. Courses numbered under 200 carry only undergraduate credit. Undergraduates with the rank of Seniors may be admitted to 200 courses.

Students who are matriculated for a graduate degree must, in addition to registering in the School of Spanish Studies, register in the Office of the Graduate School of Arts and Sciences. Prior to registration in the Graduate School Office the student must have his courses approved by the Director of Graduate Studies of the Department of Romance Languages. Application for admission to the Graduate School should be made as promptly as possible, certainly not later than June first. Write to the Dean of the Graduate School for a Graduate School Bulletin and the proper application blank for admission.

With regard to credit obtained during the summer term, the rule is that no student can obtain more than one semester hour of credit per week in residence. Thus, during the six weeks of the School of Spanish Studies, the maximum credit that can be obtained is six hours.



## LIVING ACCOMMODATIONS

**Residencia.** The Spanish House (Southgate Hall) will be the resident dormitory for all students enrolled in Spanish, and for the members of the teaching staff and assistants. Students who are residents of Durham, or those who are registered in one course in some other department, may make adjustments in this rule with the permission of the Director of the School. The parlors and game-room of the *Residencia* will be the center of the social activities connected with the School program. Students will normally be grouped according to their ability to speak Spanish. Upon arrival, students should consult with Miss Chew, the House Counsellor, with regard to room assignment and roommate.

Spanish will be the language of the *Residencia*. English-speaking visitors are not admitted to the Spanish House except upon the approval of the Director of the School or of the Counsellor, nor may they be entertained in the parlors of the *Residencia*. *Personal radios are not permitted.* Quiet hours will be observed during the siesta hour, and from nine o'clock each night.

The *Residencia* will open to students at 2:00 p.m., Monday, June 11. Students should address their baggage to Southgate Hall, East Campus, Duke University, Durham, North Carolina.

**Comedor.** In the dining room of the *Residencia*, students, teachers, and assistants will meet and converse as table companions under a rotation system designed to provide frequent change of contact and acquaintance. These table contacts offer valuable supplementary training in the practical use of the language. The *Comedor* will be used on all days except Sundays, when facilities will be available in the West Campus Union. Board for the full session will be paid in advance at the time of registration.

## CULTURAL, SOCIAL, AND RECREATIONAL ACTIVITIES

**Fiestas.** *La Fiesta de San Juan* in celebration of Midsummer Eve, and *La Fiesta de la Saudía* have become school traditions. For these and other social occasions students should bring clothes for formal as well as informal dress. Especially appropriate will be such peasant costumes as those of the *china poblana*, the *charro*, the *gaucho*, etc. Persons who play the guitar, mandolin, or accordion should bring these instruments. Those who have some skill as singers, instrumentalists, actors, or readers are invited to offer their talents for common enjoyment.

**Charlas and Entertainments.** In addition to the fiestas the recreational program will include other appropriate functions. Arrangement will be made for a series of informal chats by the staff. There will be a Spanish language film, student-faculty plays, and several get-together *tertulias*.



AT RECEPTION FOR WELL-KNOWN SPANISH PIANIST AMPARO ITURBI

A flexible schedule of *horas de canto*, *partidos de croquet*, *torneos de bridge*, *horas del disco español*, and the like will be arranged to fill the after-supper interval. All of these events are under the guidance of staff members who will furnish suitable commentaries and conversational topics.

#### FEES AND EXPENSES

The University fee of \$12.00 per semester hour includes registration, tuition, and medical fee. Teachers (elementary and secondary) in full-time service are granted a scholarship rebate amounting to one-half this sum. Application for this scholarship rebate should be made to the Director of the Summer Session in advance of registration. Because of the extra facilities provided in the School of Spanish Studies, an extra fee of \$15.00 is charged.

Room rent is \$21.00 for each student where two students occupy a room. All rooms in Southgate are double rooms, but a limited number furnished as single rooms may be assigned to one person at a rent of \$40.00. Students will furnish their own bed linen, blankets, pillow, and towels.

Board in the *Comedor*, which will not be open on Sundays, is now planned at \$63.00 for the full term. The cost of Sunday meals which may be taken at the Union Building on West Campus, is not included in this figure. It is hoped that these rates may be maintained. Charges, however, are necessarily dependent on costs of labor, foods, and materials, and some adjustment may be necessary.

The major items of expense for the School of Spanish Studies are:

University fee (6 semester hours) .....	\$ 72.00
Room rent (with roommate) per person .....	21.00
Board (6-day week; estimated charge) .....	63.00
Spanish School fee .....	15.00

Total for six weeks .....\$171.00

Less scholarship for eligible teachers ..... 36.00

Total for teachers for six weeks .....\$135.00

### THE INSTRUCTIONAL STAFF

The staff includes natives of Spain and Spanish America, as well as specialists in Hispanic language and literature who are natives of the United States. Members of the staff have had wide experience in summer language-school work, and have the benefit of foreign residence, travel and study. Native Spanish and Spanish American assistants will provide valuable cultural and conversational contacts in the life of the *Residencia* and in the social programs.

From its beginning, the School of Spanish Studies has each year brought to its staff outstanding teachers, writers and lecturers. Among them have been such well-known figures as José Arce, Germán Arciniegas, José A. Balseiro, Américo Castro, Carlos García Prada, Juan Ramón Jaménez, Raimundo Lazo, Tomás Navarro Tomás, Pedro Salinas, Arturo Torres Riosco.

The 1951 session will add to this roster the distinguished professor and critic, **José Antonio Portuondo**, native of Cuba and Doctor en Filosofía



y Letras from the University of Havana. At present, assistant professor of Spanish American Literature at Columbia University, he has previously taught at the Colegio de México, and at the Universities of New Mexico and Wisconsin. In 1948 Sr. Portuondo received a John Simon Guggenheim Fellowship. He has published numerous books, pamphlets, and articles on Cuban and Spanish American Literature, among which are: *Proceso de la cultura cubana*, La Habana, 1938; *El contenido social de la literatura cubana*, México, 1944; *Concepto de la Poesía*, México, 1945; *El contenido político y social de la obra de José Antonio Ramos*, México, 1946; *Períodos y "Generaciones" en la historiografía literaria hispanoamericana*, México, 1948; *Situación actual de la crítica literaria hispanoamericana*, México, 1949.

*la historiografía literaria hispanoamericana*, México, 1948; *Situación actual de la crítica literaria hispanoamericana*, México, 1949.

**José Amor y Vázquez** is a native of Spain, educated in Spain and Cuba. He holds the Doctorado en Leyes from the University of Havana, and is preparing his Doctorado en Filosofía y Letras there, and at the same time his Ph.D. at Brown University. He now teaches at Brown University and

has taught formerly at the Nobel Academy in Havana, at the Centro Venezolano-Americano in Caracas, at Russell Sage College, and in summer sessions at the University of Havana and at the University of San Carlos, Guatemala.

**Gifford Davis**, Director of the School of Spanish Studies, has been associated with the School since its founding. He is Associate Professor of Romance Languages and Director of Undergraduate Studies in Spanish at Duke University. He holds the A.M. and Ph.D. degrees from Harvard University. Sr. Davis has travelled in Mexico, and has studied in Grenoble, Paris, Santander and Madrid. He is the author of articles on Spanish medieval literature.

**John Morton Fein** is Assistant Professor of Spanish at Duke University. He holds the A.B., A.M., and Ph.D. degrees from Harvard University where he has taught and where he was the first Resident Director of the Modern Language Center. Sr. Fein has travelled in Mexico, France, Spain, and Portugal. In 1948 he taught English at the Universidad Internacional Menéndez y Pelayo in Santander, Spain.

**Richard L. Predmore**, Professor of Spanish at Duke University, returns to the summer staff for the second year. He was formerly chairman of the Romance Languages Department at Rutgers University. Sr. Predmore holds the M.A. degree from Rutgers University, and the D.M.L. from Middlebury College. He has studied at the University of Madrid, at the Centro de Estudios Históricos, and at Columbia University. As a fellow of the Rockefeller Foundation he spent eight months in Central America where he did research on the Spanish of Guatemala. He has published articles on linguistics, modern poetry, and on the *Quijote*. Recently Sr. Predmore edited *Incidents of Travel in Central America, Chiapas, and Yucatan* by John Lloyd Stephens.



**Elías Torre**, Instructor in Romance Languages at Rutgers University, is returning to the staff for the second year. He was born in Puerto Rico of Spanish family, and was educated in Spain. Sr. Torre holds a Bachillerato de Instituto (Cardinal Cisneros), a Bachillerato Universitario (Madrid), and the M.A. degree from New York University.

**Jeanne Chew**, Assistant Professor of Romance Languages at Bucknell University, holds the A.M. degree from Duke University. She has travelled in Europe and studied at the Sorbonne. A former student in the School of Spanish Studies, Miss Chew will return to her second year as Social Director and House Counsellor.



### Courses of Instruction

**S1. Beginning Spanish.**—Pronunciation; essentials of grammar; dictation exercises; early reading of simple prose; vocabulary lists; consistent use of the language as a means of instruction and as a means of attaining a basic aural command. June 12-July 2. *B.117.* 7:40-9:00 and 11:00-12:20. 3 s.h. SR. FEIN

**S2. Beginning Spanish.**—Continuation of S1. July 3-July 21. *B.117.* 7:40-9:00 and 11:00-12:20. 3 s.h. SR. FEIN

NOTE: A student enrolled in Spanish S2 must also attend Spanish S1.

**S3. Intermediate Spanish.**—Systematic review of verbs; drill on high frequency idioms; review of special grammatical difficulties; dictation exercises and oral drill; constant use of the language as medium of instruction; reading of graduated selection of modern prose. *B.113.* 7:40-9:00. 3 s.h. SR. DAVIS

**S4. Intermediate Spanish.**—Reading of modern short stories and novels, with emphasis on achievement of ability to read without translation; continued oral-aural exercises; dictation; idiom study; grammar review as necessary. *B.113.* 11:00-12:20. 3 s.h. SR. TORRE

**S65. Introduction to Modern Spanish Literature.**—Study of representative masterpieces of the modern novel; brief lectures in Spanish; collateral reading of critical commentaries. *B.119.* 7:40-9:00. 3 s.h. SR. TORRE

**S68. Introduction to Modern Spanish Literature.**—Study of typical works in the field of the novel and lyric, chiefly of the modern period; lectures on literary, social, and cultural backgrounds and tendencies; collateral readings and reports. *B.119.* 11:00-12:20. 3 s.h. SR. AMOR Y VÁZQUEZ

**S174. Phonetics and Diction.**—The aim of this course is twofold; to improve the student's pronunciation and to increase his power of oral expression. The elements of Spanish phonetics will be presented in conjunction with practical exercises. Practice in oral expression will be afforded by class discussion of selected topics. *B.118.* 9:20-10:40. 3 s.h. SR. PREDMORE

**S256. Contemporary Spanish American Literature (1910-1950).**—A brief panorama of the literary production of the last two Spanish American generations. *B.119.* 9:20-10:40. 3 s.h. SR. PORTUONDO

**S260. Advanced Composition and Syntax.**—Study of fundamental difficulties in the language; practice in writing idiomatic Spanish; exercises in free composition. For students who have a satisfactory command of Spanish grammar and fair conversational ability. *B.118.* 11:00-12:20. 3 s.h. SR. PORTUONDO

**S275. Contemporary Spanish Literature: Essay and Lyric Poetry.**—A study of the revision of national values and literary expression in the twentieth century with particular reference to the crisis of 1898 and to the enrichment of the Spanish tradition through extrapeninsular influence. *B.118.* 7:40-9:00. 3 s.h. SR. PREDMORE

---

Outside of the School of Spanish Studies, Professor John Tate Lanning is offering a course of interest to Hispanicists:

**History S231. The Hispanic Colonies of the New World.**—The development of the Iberian states as colonizing powers, the work of the conquerors, the Spanish colonial policy and system, their influences and results, native races, the international contest for supremacy, and the decay of Spanish power in America and the Philippines. 2.102. 9:20-10:40. 3 s.h. MR. LANNING



**Directions to Summer Session Applicants**

All applicants for Summer Session courses who are not now in residence at Duke University must fill out accurately and in detail the form below and return it to the Director of the Summer Session. In your covering letter please indicate how many years of formal study of Spanish you have had (also where and when), and indicate whether you have had foreign travel or study or experience in other language schools. Preference in enrollment will be given to persons returning the form promptly, but a place in a particular course cannot be assured until all fees are paid. Undergraduates or graduates who are enrolled in a university or college other than Duke University and who are seeking to transfer summer session credits to the college in which they are matriculated should request a course approval form to be certified by their dean or registrar. Persons applying for acceptance as candidates for an advanced degree at Duke University should write the Dean of the Graduate School for the necessary forms.

-----

**Application for Enrollment in  
The Duke University Summer Session**

Mr., Mrs., Miss.....

Street address, Rural route, or P. O. Box.....

Post Office..... State.....

Nationality..... Race.....

Please reserve a place for me in the following courses listed in the Summer Session Bulletin.

Department	No. of Course	Title of Course
.....	.....	.....
.....	.....	.....

Name and address of High School from which you graduated.....

Have you attended a college? Yes..... No.....

College..... Location.....

Degree..... Have you been accepted at Duke University as a candidate for a degree?.....What degree?.....

If you have not been accepted as a candidate for a degree, do you wish to be?.....

What degree?.....

In what school or college are you seeking to enroll: (Check) Undergraduate credits: Trinity College (Men).....; Woman's College.....;

General student (unclassified) .....; Graduate credits: Arts and Science .....; General (unclassified).....

Do you wish a room reserved in the Residencia?.....

Are you at present a college student?..... If so, where?.....

..... What class?.....

Are you a full-time teacher?.....

Name and address of school.....

Teaching position.....

Total number years teaching experience.....

Will your fees be paid by (a) yourself.....

(b) Veterans' Administration.....

Have you attended previous Summer Sessions at Duke: Yes.....;

Years .....; No.....

**BULLETIN**  
**OF**  
**DUKE UNIVERSITY**



**The Graduate School  
of Arts and Sciences**

**ANNOUNCEMENTS FOR 1951-1952**

**VOLUME 23**

**February, 1951**

**NUMBER 4-E**

# Annual Bulletins

FOR GENERAL BULLETIN of Duke University, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF UNDERGRADUATE INSTRUCTION, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE COLLEGE OF ENGINEERING, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES, apply to *The Dean of the Graduate School*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF FORESTRY, apply to *The Dean of the School of Forestry*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF LAW, apply to *The Dean of the School of Law*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF MEDICINE, apply to *The Dean of the School of Medicine*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF NURSING, apply to *The Dean of the School of Nursing*, Duke University, Durham, N. C.

FOR BULLETIN OF THE DIVINITY SCHOOL, apply to *The Dean of the Divinity School*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SUMMER SESSION, apply to *The Director of the Summer Session*, Duke University, Durham, N. C.

Published by Duke University monthly except in July, August, September, and December. Entered as second-class matter March 25, 1929; at the Post Office of Durham, North Carolina, under the Act of August 24, 1912.

BULLETIN  
OF  
DUKE UNIVERSITY

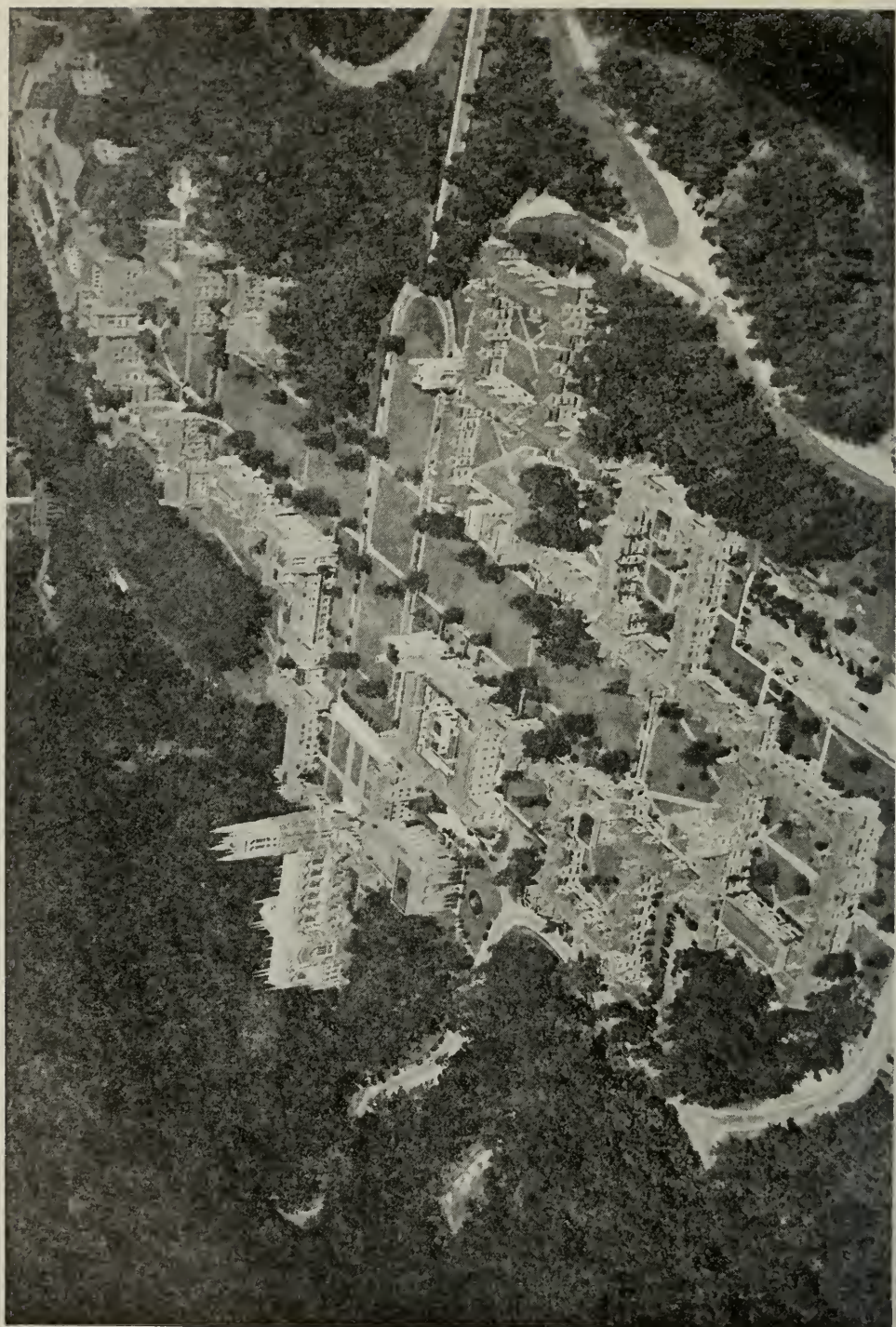
THE GRADUATE SCHOOL  
OF ARTS AND SCIENCES



1950-1951  
ANNOUNCEMENTS FOR 1951-1952

DURHAM, NORTH CAROLINA  
1951





# Table of Contents



	PAGE
UNIVERSITY CALENDAR .....	5
OFFICERS OF ADMINISTRATION .....	8
INSTRUCTIONAL STAFF .....	9
HOLDERS OF FELLOWSHIPS AND SCHOLARSHIPS .....	16
DEGREES OFFERED .....	28
GENERAL REGULATIONS .....	36
FELLOWSHIPS, SCHOLARSHIPS, AND ASSISTANTSHIPS .....	37
TUITION AND FEES .....	39
THE LIBRARIES .....	42
SCIENCE LABORATORIES .....	44
OAK RIDGE INSTITUTE OF NUCLEAR STUDIES .....	45
THE DUKE FOREST .....	46
COOPERATIVE PROGRAMS WITH UNIVERSITY OF NORTH CAROLINA...	46
APPOINTMENTS OFFICE .....	47
FOREIGN STUDENTS .....	47
GRADUATE STUDY IN THE SUMMER SESSION .....	48
COURSES OF INSTRUCTION, alphabetically, by departments .....	50
Aesthetics, Art, and Music .....	50
Ancient Languages and Literatures .....	50
Botany .....	53
Chemistry .....	55
Economics .....	57
Education .....	60
English .....	64
Forestry .....	67
Germanic Languages and Literature .....	69
History .....	70
Mathematics .....	73
Philosophy .....	75
Physics .....	76
Political Science .....	78
Psychology .....	80
Religion .....	83
Romance Languages .....	86
Sociology and Anthropology .....	88
Zoology .....	91
Medical School .....	93
ADVANCED DEGREES CONFERRED JUNE 5, 1950 .....	96



# Calendar of the Graduate School



## *Summer Session 1951*

1951

June	12	Tuesday—Registration of students for Summer Session, first term.
June	13	Wednesday—Instruction begins for Summer Session, first term.
July	9-12	French examinations for candidates for graduate degrees. Candidates register in the Graduate School Office not later than July 2.
July	21	Saturday—Registration of students for second term of Summer Session.
July	21	Saturday—First term of Summer Session ends.
July	23	Monday—Instruction begins for second term of Summer Session.
Aug.	31	Friday—Second term of Summer Session ends.

## *Academic Year 1951-1952*

Sept.	17-19	Monday through Wednesday—Registration of graduate students for first semester.
Sept.	19	Wednesday, 11:00 A.M.—Formal opening of the University.
Sept.	20	Thursday—Instruction begins.
Oct.	1-6	French examinations for candidates for graduate degrees. Candidates register in the Graduate School Office for these examinations not later than September 25.
Oct.	8-13	German examinations for candidates for graduate degrees. Candidates register in the Graduate School Office for these examinations not later than October 2.
Oct.	15	Monday—Last day for submitting thesis subjects for the degree of Doctor of Philosophy.
Nov.	14	Wednesday—Last day for submitting thesis subjects for the degrees of Master of Arts and Master of Education.
Nov.	22	Thursday—Thanksgiving Day: a holiday.
Dec.	10	Monday—Founders Day.
Dec.	19	Wednesday, 5:00 P.M.—Christmas recess begins.

1952

Jan.	3	Thursday, 8:00 A.M.—Instruction is resumed.
Jan.	3-12	Reading period.
Jan.	9-11	Wednesday through Friday—Registration of resident graduate students for second semester.
Jan.	16	Wednesday—Mid-year examinations begin.
Jan.	26	Saturday—Mid-year examinations end.



Jan.	28-29	Monday and Tuesday—Registration for second semester of students not in residence during first semester.
Jan.	30	Wednesday—Second semester begins.
Feb.	11-16	German examinations for candidates for graduate degrees. Candidates register in the Graduate School Office for these examinations not later than February 4.
Feb.	19-23	French examinations for candidates for graduate degrees. Candidates register in the Graduate School Office for these examinations not later than February 9.
March	1	Saturday—Last day for applying for University fellowships, graduate assistantships, and graduate scholarships.
March	15	Saturday—Students who expect to receive advanced degrees in June must notify the Graduate School Office before this date.
March	22	Saturday, 12:30 P.M.—Spring vacation begins.
March	31	Monday, 8:00 A.M.—Instruction is resumed.
April	15	Tuesday—Last day for submitting theses for degree of Doctor of Philosophy.
May	1	Thursday—Last day for paying special dissertation fee of \$50.00 required of candidates for degree of Doctor of Philosophy.
May	1	Thursday—Last day for submitting theses for degrees of Master of Arts and Master of Education.
May	10-19	Reading period.
May	19	Monday—Final examinations, second semester, begin.
May	29	Thursday—Final examinations, second semester, end.
May	31	Saturday—Commencement begins.
June	1	Sunday—Commencement sermon.
June	2	Monday—Commencement address; graduating exercises.



# 1951

JANUARY	APRIL	JULY	OCTOBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
FEBRUARY	MAY	AUGUST	NOVEMBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
MARCH	JUNE	SEPTEMBER	DECEMBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

# 1952

JANUARY	APRIL	JULY	OCTOBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
FEBRUARY	MAY	AUGUST	NOVEMBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
MARCH	JUNE	SEPTEMBER	DECEMBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

# Officers of Administration



EDENS, ARTHUR HOLLIS, B.Ph., A.M., M.P.A., Ph.D., LL.D. <i>President of the University</i>	West Campus
FLOWERS, ROBERT LEE, A.M., LL.D. <i>Chancellor of the University</i>	West Campus
WANNAMAKER, WILLIAM HANE, A.B., A.M., Litt.D. <i>Vice-Chancellor of the University</i>	West Campus
GROSS, PAUL MAGNUS, B.S., A.M., Ph.D. <i>Vice-President in the Educational Division and Dean of the Graduate School of Arts and Sciences</i>	Hope Valley
JORDAN, CHARLES EDWARD, A.B., LL.D. <i>Vice-President in the Division of Public Relations and Secretary of the University</i>	813 Vickers Avenue
HERRING, HERBERT JAMES, A.B., A.M., LL.D. <i>Vice-President in the Division of Student Life and Dean of Trinity College</i>	Myrtle Drive
BROWER, ALFRED SMITH, A.B. <i>Business Manager and Comptroller</i>	1550 Hermitage Court
MARKHAM, CHARLES BLACKWELL, A.B., A.M. <i>Treasurer of the University</i>	204 Dillard Street
POWELL, BENJAMIN EDWARD, A.B., B.L.S., Ph.D. <i>Librarian</i>	626 Swift Avenue
ROBERT, JOSEPH CLARKE, A.B., A.M., Ph.D. <i>Associate Dean of the Graduate School</i>	1102 B Street
WARD, CHARLES EUGENE, A.B., A.M., Ph.D. <i>Director of Admissions, the Graduate School</i>	2429 Perkins Road
INMAN, SARA ANNE, B.S. <i>Graduate School Recorder</i>	1014 Broad Street

## EXECUTIVE COMMITTEE OF THE GRADUATE SCHOOL COUNCIL

PAUL MAGNUS GROSS, B.S., A.M., Ph.D. <i>Dean of the Graduate School of Arts and Sciences, ex officio</i>
ROBERT TAYLOR COLE, A.B., A.M., Ph.D.
JOHN JAY GERGEN, A.B., A.M., Ph.D.
WILLIAM HENRY IRVING, B.A., B.A. (Oxon.), M.A., Ph.D.
PAUL JACKSON KRAMER, A.B., M.Sc., Ph.D.
JOHN TATE LANNING, A.B., A.M., Ph.D.
GLENN NEGLEY, A.B., M.A., Ph.D.

# Instructional Staff



## MEMBERS OF THE GRADUATE SCHOOL COUNCIL

*The date denotes the first year of service at Duke University.*

ADAMS, DONALD KEITH, (1931) A.B., M.A., Ph.D. <i>Professor of Psychology</i>	Cornwallis Road
BANHAM, KATHERINE MAY, (1946) B.S., M.A., Ph.D. <i>Associate Professor of Psychology</i>	115 North Dillard Street
BAUM, PAULL FRANKLIN, (1922) A.B., A.M., Ph.D. <i>Professor of English</i>	112 Pinecrest Road
BERNHEIM, FREDERICK, (1930) A.B., Ph.D. <i>Professor of Pharmacology</i>	Woodridge Drive, Rockwood
BIGELOW, LUCIUS AURELIUS, (1929) S.B., Ph.D. <i>Professor of Chemistry</i>	131 Pinecrest Road
BLOMQUIST, HUGO LEANDER, (1920) B.S., Ph.D. <i>Professor of Botany</i>	922 Demerius Street
BOOKHOUT, CAZLIN GREEN, (1935) A.B., A.M., Ph.D. <i>Associate Professor of Zoology</i>	1307 Alabama Avenue
CARLITZ, LEONARD, (1932) A.B., A.M., Ph.D. <i>Professor of Mathematics</i>	2303 Cranford Road
CARR, JOHN WINDER, JR., (1926) A.B., A.M., Ph.D. <i>Professor of Education</i>	926 Monmouth Avenue
CARROLL, EBER MALCOLM, (1923) A.B., A.M., Ph.D. <i>Professor of History</i>	H-1-C University Apartments
CLYDE, PAUL HIBBERT, (1937) A.B., A.M., Ph.D. <i>Professor of History</i>	Cole Mill Road
COLE, ROBERT TAYLOR, (1935) A.B., A.M., Ph.D. <i>Professor of Political Science</i>	Sylvan Road
COWPER, FREDERICK AUGUSTUS GRANT, (1918) A.B., A.M., Ph.D. <i>Professor of Romance Languages</i>	1017 Dacian Avenue
CURTISS, JOHN SHILLTON, (1945) A.B., A.M., Ph.D. <i>Associate Professor of History</i>	718 Vickers Avenue
DE VYVER, FRANK TRAVER, (1935) A.B., A.M., Ph.D. <i>Professor of Economics</i>	8 Sylvan Road
DRESSEL, FRANCIS GEORGE, (1929) B.S., M.S., Ph.D. <i>Associate Professor of Mathematics</i>	309 Francis Street
EASLEY, HOWARD, (1930) A.B., M.A., Ph.D. <i>Associate Professor of Education</i>	Guess Road
GERGEN, JOHN JAY, (1936) A.B., A.M., Ph.D. <i>Professor of Mathematics</i>	2803 Nation Avenue
GILBERT, ALLAN, (1920) B.A., A.M., Ph.D. <i>Professor of English</i>	516 Carolina Circle
GILBERT, KATHARINE EVERETT, (1930) A.B., A.M., Ph.D., Litt.D. <i>Professor of Philosophy</i>	516 Carolina Circle

- GHODES, CLARENCE, (1930) A.B., A.M., Ph.D.  
*Professor of American Literature* 2614 Stuart Drive
- GORDY, WALTER, (1946) A.B., M.A., Ph.D.  
*Professor of Physics* 233 Forest Wood Drive
- GRAY, IRVING EMERY, (1930) B.S., M.S., Ph.D.  
*Professor of Zoology* 124 Pinecrest Road
- GROSS, PAUL MAGNUS, (1919) B.S., A.M., Ph.D.  
*William Howell Pegram Professor of Chemistry* Hope Valley
- HALL, FRANK GREGORY, (1926) A.B., A.M., Ph.D.  
*Professor of Physiology* 122 Pinecrest Road
- HALLOWELL, JOHN HAMILTON, (1942) A.B., A.M., Ph.D.  
*Professor of Political Science* 2709 Augusta Drive
- HANDLER, PHILIP, (1939) B.S., M.S., Ph.D.  
*Professor in Biochemistry and Nutrition* 2307 Sprunt Street
- HARGITT, GEORGE THOMAS, (1930) Ph.B., A.M., Ph.D., Sc.D.  
*Professor of Zoology* 811 Watts Street
- HART, HORNE LL NORRIS, (1938) A.B., M.A., Ph.D.  
*Professor of Sociology* Cranford Road
- HATLEY, CHARLES CLEVELAND, (1917) A.B., A.M., Ph.D.  
*Professor of Physics* 708 Buchanan Boulevard
- HAUSER, CHARLES ROY, (1929) B.S., M.S., Ph.D.  
*Professor of Chemistry* 1020 Rose Hill Avenue
- HOOVER, CALVIN BRYCE, (1925) A.B., Ph.D., Litt.D.  
*Professor of Economics* 1702 Duke University Road
- HUBBELL, JAY BROADUS, (1927) A.B., A.M., Ph.D.  
*Professor of American Literature* 121 Pinecrest Road
- IRVING, WILLIAM HENRY, (1936) B.A., B.A. (Oxon.), M.A., Ph.D.  
*Professor of English* 2707 Legion Avenue
- JENSEN, HOWARD EIKENBERRY, (1931) A.B., A.M., B.D., Ph.D.  
*Professor of Sociology* 143 Pinecrest Road
- JORDAN, BRADY RIMBEY, (1927) Litt.B., Ph.D.  
*Professor of Romance Languages* 117 Pinecrest Road
- KOCH, SIGMUND, (1942, 1948) A.B., A.M., Ph.D.  
*Associate Professor of Psychology* 2921 Horton Road
- KORSTIAN, CLARENCE FERDINAND, (1930) B.S.F., M.F., M.A., Ph.D.  
*Professor of Silviculture* 1718 Duke University Road
- KRAMER, PAUL JACKSON, (1931) A.B., M.Sc., Ph.D.  
*Professor of Botany* 2251 Cranford Road
- KUDER, G. FREDERICK, (1948) A.B., A.M., Ph.D.  
*Professor of Psychology* Perkins Road
- LANNING, JOHN TATE, (1927) A.B., A.M., Ph.D.  
*Professor of History* Hope Valley
- LAPRADE, WILLIAM THOMAS, (1909) A.B., Ph.D.  
*Professor of History* 1108 Monmouth Avenue
- LEARY, LEWIS, (1941) B.S., A.M., Ph.D.  
*Professor of American Literature* 2106 Woodrow Street
- LONDON, FREDERICK, (1938) Ph.D., Sc.D.  
*Professor of Theoretical Chemistry* 1508 Oakland Avenue

LUNDHOLM, HELGE, (1930) Fil. Kand., Fil. Lic., Ph.D. <i>Professor of Psychology</i>	803 Second Street
NEGLEY, GLENN, (1946) A.B., M.A., Ph.D. <i>Professor of Philosophy</i>	1700 Shawnee Street
NELSON, ERNEST WILLIAM, (1926) A.B., A.M., Ph.D. <i>Associate Professor of History</i>	2217 Club Boulevard
*NEURATH, HANS, (1938) Ph.D. <i>Professor of Physical Biochemistry</i>	111 Pinecrest Road
NEWSOM, HENRY WINSTON, (1948) B.S., Ph.D. <i>Professor of Physics</i>	1111 North Gregson Street
NIELSEN, WALTER MCKINLEY, (1925) B.S. in E.E., Ph.D. <i>Professor of Physics</i>	139 Pinecrest Road
†NORDHEIM, LOTHAR WOLFGANG, (1937) Ph.D. <i>Professor of Physics</i>	2255 Cranford Road
OOSTING, HENRY JOHN, (1932) A.B., M.S., Ph.D. <i>Professor of Botany</i>	2642 University Drive
‡PATTERSON, ROBERT LEET, (1945) A.B., A.M., B.D., Ph.D. <i>Professor of Philosophy</i>	East Campus
PEARSE, ARTHUR SPERRY, (1926) B.S., A.M., Ph.D., LL.D. <i>Professor Emeritus of Zoology</i>	803 Second Street
PETRY, RAY C., (1937) A.B., A.M., Ph.D., LL.D. <i>Professor of Church History</i>	128 Pinecrest Road
PROCTOR, ARTHUR MARCUS, (1923) A.B., A.M., Ph.D. <i>Professor of Education</i>	2106 Myrtle Drive
RANKIN, ROBERT STANLEY, (1927) A.B., A.M., Ph.D. <i>Professor of Political Science</i>	1107 Knox Street
RATCHFORD, BENJAMIN ULYSSES, (1928) B.S., A.M., Ph.D. <i>Professor of Economics</i>	133 Pinecrest Road
ROBERT, JOSEPH CLARKE, (1938) A.B., A.M., Ph.D. <i>Professor of History</i>	1102 B Street
ROBERTS, JOHN H., (1931) A.B., Ph.D. <i>Professor of Mathematics</i>	2813 Legion Avenue
RODNICK, ELIOT H., (1949) B.A., Ph.D. <i>Professor of Psychology and Director of Clinical Training in Psychology</i>	411 Francis Street
ROGERS, ROBERT S., (1937) A.B., A.M., Ph.D., F.A.A.R. <i>Professor of Latin</i>	148 Pinecrest Road
SAYLOR, JOHN HENRY, (1928) A.B., A.M., Ph.D. <i>Professor of Chemistry</i>	707 Club Boulevard
SIMMONS, EDWARD C., (1947) A.B., A.M., Ph.D. <i>Professor of Economics</i>	2510 Perkins Road
SMITH, DAVID TILLERSON, (1930) A.B., M.D. <i>Professor of Bacteriology;</i> <i>Associate Professor of Medicine</i>	Hope Valley
SMITH, HILRIE SHELTON, (1931) A.B., Ph.D., D.D., Litt.D. <i>Professor of American Religious Thought</i>	1523 Hermitage Court
SMITH, ROBERT SIDNEY, (1932) A.B., A.M., Ph.D. <i>Professor of Economics</i>	2236 Cranford Road

\* Resigned, September 1, 1950.

† Absent on leave in government service, 1950-51.

‡ Absent on sabbatical leave, 1951-52.



SPENGLER, JOSEPH JOHN, (1934) A.B., M.A., Ph.D. <i>Professor of Economics</i>	2240 Cranford Road
SPONER, HERTHA, (1935) Ph.D. <i>Professor of Physics</i>	Hope Valley
SYDNOR, CHARLES SACKETT, (1936) A.B., Ph.D., Litt.D. <i>Professor of History</i>	116 Pinecrest Road
THOMAS, JOSEPH MILLER, (1930) A.B., Ph.D. <i>Professor of Mathematics</i>	2215 Cranford Road
THOMPSON, EDGAR TRISTRAM, (1935) A.B., A.M., Ph.D. <i>Professor of Sociology</i>	138 Pinecrest Road
VOLLMER, CLEMENT, (1926) A.B., A.M., Ph.D. <i>Professor of German</i>	2114 Myrtle Drive
VON BECKERATH, HERBERT, (1935) Ph.D. <i>Professor of Economics and Political Science</i>	Hope Valley
VOSBURGH, WARREN CHASE, (1928) B.S., M.S., Ph.D. <i>Professor of Chemistry</i>	2319 Englewood Avenue
WALTON, LORING BAKER, (1929) A.B., Lic. ès L., Ph.D. <i>Professor of Romance Languages</i>	2235 Cranford Road
WARD, CHARLES EUGENE, (1927) A.B., A.M., Ph.D. <i>Associate Professor of English</i>	Perkins Road
WHARTON, GEORGE WILLARD, JR., (1939) B.S., Ph.D. <i>Associate Professor of Zoology</i>	1202 Oval Drive
WIDGERY, ALBAN GREGORY, (1930) B.A., M.A. <i>Professor of Philosophy</i>	152 Pinecrest Road
WILBUR, KARL MILTON, (1946) A.B., A.M., Ph.D. <i>Professor of Zoology</i>	2414 Club Boulevard
WILSON, ROBERT RENBERT, (1925) A.B., A.M., Ph.D. LL.D. <i>Professor of Political Science</i>	717 Anderson Street
WOLF, FREDERICK ADOLPHUS, (1927) A.B., A.M., Ph.D. <i>Professor of Botany</i>	924 Urban Avenue
WOODY, ROBERT HILLIARD, (1929) Ph.B., A.M., Ph.D. <i>Associate Professor of History</i>	2648 University Drive
ZENER, KARL EDWARD, (1928) Ph.B., A.M., Ph.D. <i>Professor of Psychology</i>	Sparger Road
<hr/>	
ADDOMS, RUTH MARGERY, (1930) B.A., M.A., Ph.D. <i>Professor of Botany</i>	1413 North Duke Street
ANDERSON, LEWIS EDWARD, (1936) B.S., A.M., Ph.D. <i>Associate Professor of Botany</i>	2020 Sunset Avenue
ANDERSON, ROGER FABIAN, (1951) B.S., M.S., Ph.D. <i>Associate Professor of Forest Entomology</i>	1212 Sixth Street
BEACH, WALDO, (1946) A.B., B.D., Ph.D. <i>Associate Professor of Christian Ethics</i>	100 Vineyard Street
*BEAL, JAMES ALLEN, (1939) M.S., Ph.D. <i>Professor of Forest Entomology</i>	2232 Cranford Road
BERNHLM, MARY LILAS CHRISTIAN, MRS., (1930) B.A., M.A., Ph.D. <i>Associate Professor of Biochemistry</i>	Woodridge Drive, Rockwood
BLACK, MARTIN LEE, JR., (1930) A.B., M.B.A., C.P.A. <i>Professor of Accounting</i>	135 Pinecrest Road

\* Resigned, September 1, 1950.

- BOLMEIER, EDWARD CLAUDE, (1948) B.S., M.A., Ph.D.  
*Associate Professor of Education* Apt. No. 217, Faculty Apts.
- BOYCE, BENJAMIN, (1950) , B.A., M.A., Ph.D.  
*Professor of English* 116 Pinecrest Road
- BRADSHAW, CHARLES KILGO, (1939) A.B., M.A., Ph.D.  
*Associate Professor of Chemistry* 2318 Englewood Avenue
- BRINKLEY, ROBERTA FLORENCE, (1947) A.B., A.M., Ph.D.  
*Professor of English* East Campus
- BROWN, FRANCES, (1931) A.B., Ph.D.  
*Associate Professor of Chemistry* 205 Jones Street
- BROWNLEE, WILLIAM H., (1948) A.B., Th.B., Th.M., Ph.D.  
*Assistant Professor of Old Testament* 1014 Edith Street
- CASTELLANO, JUAN RODRIGUEZ, (1947) Bach., Lic. en Fil. y Let., Doc. en Fil.  
*Associate Professor of Romance Languages* 805 Third Street
- CHILDS, BENJAMIN GUY, (1924) B.A., M.A.  
*Professor of Education* 1019 West Markham Avenue
- CLARK, KENNETH WILLIS, (1931) A.B., B.D., Ph.D.  
*Professor of New Testament* 1308 West Markham Avenue
- COHEN, LOUIS DAVID, (1946) B.A., M.A., Ph.D.  
*Assistant Professor of Psychology and Assistant Professor of Neuropsychiatry* 913 Monmouth Avenue
- COILE, THEODORE STANLEY, (1935) B.S.F., M.F., Ph.D.  
*Professor of Forest Soils* Hillsboro Road
- CONANT, NORMAN FRANCIS, (1935) B.S., A.M., Ph.D.  
*Professor of Mycology;*  
*Associate Professor of Bacteriology* Old Cornwallis Road
- CONNERY, ROBERT HOWE, (1949) B.A., M.A., Ph.D.  
*Professor of Political Science* 906 Buchanan Boulevard
- CUSHMAN, ROBERT E., (1945) A.B., B.D., Ph.D.  
*Professor of Systematic Theology* 130 Pinecrest Road
- DAL, BINGHAM, (1943) A.B., A.M., Ph.D.  
*Lecturer in Psychiatry; Professor of Psychology (Part-time)* 3407 Chapel Hill Road
- DAVIES, WILLIAM DAVID, (1950) B.A., B.D., M.A., D.D.  
*Professor of Biblical Theology* Duke University
- DAVIS, GIFFORD, (1930) A.B., A.M., Ph.D.  
*Associate Professor of Romance Languages* 2248 Cranford Road
- DUKE, KENNETH LINDSAY, (1940) A.B., Ph.D.  
*Associate Professor of Anatomy* 701 Club Boulevard
- EADIE, GEORGE SHARP, (1930) M.A., M.B., Ph.D.  
*Professor of Physiology and Pharmacology* Hope Valley
- ELLIOTT, WILLIAM WHITFIELD, (1925) B.A., M.A., Ph.D.  
*Professor of Mathematics* Alastair Apartments
- EVERETT, JOHN WENDELL, (1932) A.B., Ph.D.  
*Professor of Anatomy* 2605 University Drive
- FERGUSON, ARTHUR BOWLES, (1939) A.B., Ph.D.  
*Assistant Professor of History* 209 Woodridge Drive
- FOERSTER, NORMAN, (1948) A.M., Litt.D.  
*Visiting Professor of English* Chapel Hill, N. C.
- GARMEZY, NORMAN, (1950) B.B.A., M.A., Ph.D.  
*Assistant Professor of Psychology* Hope Valley Road

- GREULING, EUGENE, (1948) B.S., Ph.D.  
*Associate Professor of Physics* 3409 Chapel Hill Road
- HAMILTON, WILLIAM BASKERVILLE, JR., (1936) A.B., A.M., Ph.D.  
*Associate Professor of History* 2256 Cranford Road
- HANNA, FRANK ALLAN, (1948) A.B., Ph.M., Ph.D.  
*Associate Professor of Economics* 2239 Cranford Road
- HARRAR, ELWOOD SCOTT, (1936) B.S., M.S., Ph.D.  
*Professor of Wood Technology* 2228 Cranford Road
- HETHERINGTON, DUNCAN CHARTERIS, (1930) A.B., M.A., Ph.D., M.D.  
*Professor of Anatomy* University Apartments
- HILL, DOUGLAS, (1931) A.B., M.A., Ph.D.  
*Associate Professor of Chemistry* Dixon Road
- HOBBS, MARCUS EDWIN, (1935) A.B., A.M., Ph.D.  
*Professor of Chemistry* 115 Pinecrest Road
- HORN, EDWARD C., (1946) B.S., A.M., Ph.D.  
*Assistant Professor of Zoology* 2509 Cascadilla Street
- HUMPHREY, DON DOUGAN, (1945) A.B., Ph.D.  
*Professor of Economics* 2802 Legion Avenue
- HUNTER, WANDA SANBORN, (1947) A.B., M.S., Ph.D.  
*Associate Professor of Zoology* 202 Faculty Apartments
- \*JOHNSON, MYCHYLE W., (1937) A.B., Ph.D.  
*Associate Professor of Zoology* 106 Turrentine Street
- KAMIN, HENRY, (1950) B.S., Ph.D.  
*Instructor in Biochemistry* 2761 Guess Road
- KLOPFER, WALTER G., (1950) A.B., M.A., Ph.D.  
*Lecturer in Psychology* 2617 Acadia Street
- KRUMMEL, CHARLES ALBERT, (1922) Ph.B., Ph.M., Ph.D.  
*Professor Emeritus of German* 2118 Englewood Avenue
- LABARRE, WESTON, (1946) A.B., Ph.D.  
*Associate Professor of Anthropology* 1311 Alabama Avenue
- MCCREA, FOREST DRAPER, (1930) B.S., M.S., Ph.D.  
*Associate Professor of Physiology and Pharmacology* 1023 Demerius Street
- †MCLARTY, FURMAN GORDON, (1933) A.B., B.A., A.M., Ph.D.  
*Associate Professor of Philosophy* 1511 Page Street
- MANCHESTER, ALAN KREBS, (1929) A.B., A.M., Ph.D.  
*Professor of History* 2016 Myrtle Drive
- MARKEE, JOSEPH ELDRIDGE, (1943) B.S., Ph.D.  
*Professor of Anatomy* 1015 Demerius Street
- MARKMAN, SIDNEY D., (1947) A.B., Ph.D.  
*Assistant Professor of Art* No. 10 Duke University Apts.,  
 Markham and Fifth Streets
- NAHM, HELEN, (1946) R.N., A.B., M.A., Ph.D.  
*Professor of Nursing Education and  
 Director, Division of Nursing Education* Faculty Apartments
- PARKER, HAROLD TALBOT, (1939) A.B., Ph.D.  
*Assisant Professor of History* Glenn Apartments
- PEELE, TALMAGE LEE, (1939) A.B., M.D.  
*Associate Professor of Anatomy and Associate in Medicine* University Apartments

\* Died, September 25, 1950.

† Absent on sabbatical leave, second semester, 1950-51.

- PERRY, HAROLD SANFORD, (1932) A.B., Ph.D.  
*Associate Professor of Botany* 2302 Cranford Road
- PREDMORE, RICHARD LIONEL, (1950) B.A., M.A., D.M.L.  
*Professor of Romance Languages* Perkins Road
- RANKIN, WILLIAM WALTER, JR., (1926) B.E., M.A.  
*Professor of Mathematics* 1011 Gloria Avenue
- ROPP, THEODORE, (1938) A.B., A.M., Ph.D.  
*Associate Professor of History* 302 Woodridge Drive
- ROSE, JESSE LEE, (1936) A.B., M.A., Ph.D.  
*Assistant Professor of Latin and Greek* East Campus
- RUDISILL, MABEL F., (1948) A.B., M.A., Ph.D.  
*Associate Professor of Education* Guess Road
- RUNDLES, RALPH WAYNE, (1945) A.B., Ph.D., M.D.  
*Assistant Professor of Medicine* 132 Pinecrest Road
- SAWYER, CHARLES HENRY, (1944) A.B., Ph.D.  
*Professor of Anatomy* 2119 Englewood Avenue
- SCHETTLER, CLARENCE HENRY, (1946) A.B., A.M., Ph.D.  
*Associate Professor of Sociology* 2162 Guess Road
- SCHUMACHER, FRANCIS X., (1937) B.S.  
*Professor of Forestry* 6 Sylvan Road
- SCHWERT, GEORGE W., JR., (1946) A.B., Ph.D.  
*Assistant Professor of Biochemistry* 615 Colgate Avenue
- SHEARS, LAMBERT ARMOUR, (1927) A.B., A.M., Ph.D.  
*Associate Professor of German* 917 Green Street
- SMITH, WILLIAM V., (1946) B.S., Ph.D.  
*Associate Professor of Physics* 1208 Dwire Place
- SPENCE, HERSEY EVERETT, (1918) A.B., A.M., B.D., D.D., Litt.D.  
*Professor of Biblical Literature and Religious Education* Hope Valley
- STINESPRING, WILLIAM FRANKLIN, (1936) B.A., M.A., Ph.D.  
*Professor of Old Testament* 1107 Watts Street
- STUMPF, WIPPERT A., (1948) B.S., M.A., Ph.D.  
*Associate Professor of Education* 127 Pinecrest Road
- TAYLOR, HAYWOOD MAURICE, (1930) B.S., M.S., Ph.D.  
*Professor of Toxicology and Associate Professor of Biochemistry* University Drive. Rockwood
- \*THOMSON, ROY BERTRAND, (1938) B.S., M.F., Ph.D.  
*Professor of Forest Economics* 2243 Cranford Road
- TRAVIS, MARTIN BICE, JR., (1949) A.B., A.M., Ph.D.  
*Assistant Professor of Political Science* 1405 Watts Street
- TRUESDALE, JAMES N., (1930) A.B., A.M., Ph.D.  
*Assistant Professor of Greek* Faculty Apartments
- WANG, PAUL, (1950) B.S., D.Sc.  
*Visiting Professor of Physics* 2401 Cranford Road
- WARREN, JOHN RUSH, (1946) A.B., M.S.  
*Instructor in Botany* 2002 Ruffin Street
- WAY, VERNON ELGIN, (1930) A.B., A.M., M.A.  
*Assistant Professor of Greek* 918 Urban Avenue
- WEITZ, HENRY, (1950) A.B., Ed.M., Ed.D.  
*Associate Professor of Education* 517½ S. Duke Street

\* Died, July 27, 1950.

WELSH, PAUL, (1948) A.B., Ph.D.  
*Assistant Professor of Philosophy*

Faculty Apartments

\*YOUNG, FRANKLIN WOODROW, (1945) A.B., B.D., Ph.D.  
*Assistant Professor of Biblical Theology*

No. 13 Duke University Apts.,  
 Markham and Fifth Streets

### ANGIER DUKE MEMORIAL FELLOW

<i>Name</i>	<i>Department</i>	<i>Home Address</i>
DEENER, DAVID RUSSELL A.B., M.A., University of Pittsburgh	Political Science	Oakdale, Pa.

### GURNEY HARRISS KEARNS FELLOWS IN RELIGION

BELLAMY, VIRGINIA NELLE B.S., East Tennessee State College; A.M., Duke University	Religion	Powell, Tenn.
HAMRICK, EMMETT WILLARD A.B., University of North Carolina	Religion	Shelby, N. C.
SMITH, KENNETH LEE A.B., University of Richmond; B.D., Crozer Seminary	Religion	Exmore, Va.

### CHARLES W. HARGITT RESEARCH FELLOW

BROWN, JOSHUA ROBERT C. A.B., A.M., Duke University	Zoology	Durham, N. C.
--	---------	---------------

### UNIVERSITY FELLOWS

BREWSTER, JAMES PENDLETON A.B., A.M., Duke University	Mathematics	Clemson, S. C.
BRYSK, HENRY B.S., College of the City of New York; M.S., University of Pennsylvania	Physics	New York, N. Y.
BYERS, GORDON CLEAVES A.B., University of Michigan	Mathematics	Durham, N. C.
CUNNINGHAM, NOBLE E., JR. B.A., University of Louisville; A.M., Duke University	History	Louisville, Ky.
HAMILTON, MARIAN B. A.B., Georgia State College for Women; A.M., Duke University	Sociology	Warwick, Ga.
HOLLYDAY, FREDERIC B. M. B.A., Washington and Lee University; A.M., Duke University	History	St. Michaels, Md.
KENION, ALONZO WILLIAMS A.B., A.M., Duke University	English	Hillsboro, N. C.
KOHN, EDWARD MAURICE B.S., College of the City of New York	Chemistry	New York, N. Y.
MILLER, WILLIAM STARR B.S., M.S., University of Georgia	Education	Plainville, Ga.
PANNIL, HARRY BURNELL B.A., Randolph-Macon College; B.D., Duke University	Religion	Ashland, Va.
ROBINSON, BETTY BELLE B.A., McMaster University; A.M., Duke University	Economics	Ontario, Canada
SCARROW, HOWARD ALBERT A.B., Duke University; M.A., Wayne University	Political Science	Detroit, Mich.

\* Resigned, August 31, 1950.



<i>Name</i>	<i>Department</i>	<i>Home Address</i>
SHARP, HENRY, JR. B.E., Vanderbilt University; A.M., Duke University	Mathematics	Nashville, Tenn.
STEELE, ARTHUR ROBERT A.B., University of California; M.A., University of New Mexico	History	Oakland, Calif.
WILES, CHARLES PRESTON B.A., Washington College, Md.; A.M., Duke University	Religion	Brunswick, Md.

## GRADUATE ASSISTANTS

ABBOT, WILLIAM WRIGHT, III A.B., University of Georgia; A.M., Duke University	History	Louisville, Ga.
ANDERSON, DONALD KENNEDY, JR. B.A., Yale University; M.A., Northwestern University	English	Evanston, Ill.
ANDERSON, LUCIAN DUMAS A.B., Winthrop College; A.M., Duke University	English	Seneca, S. C.
BARLOW, JOHN ALFRED A.B., Oberlin College	Psychology	Durham, N. C.
BARNES, ROBERT DRANE B.S., Davidson College	Zoology	Greensboro, N. C.
BARRY, RICHARD SCHRIVER A.B., Franklin and Marshall College; A.M., Duke University	History	Brighton, Mass.
BAYLESS, PHILIP L. A.B., Oberlin College	Chemistry	Durham, N. C.
BLOSSOM, THOMAS A.B., Amherst College; A.M., Columbia University	History	Creedmoor, N. C.
BORMANN, FREDERICK B.S., Rutgers University; A.M., Duke University	Botany	Westwood, N. J.
BOWDEN, ELBERT VICTOR B.A., University of Connecticut	Economics	Wilmington, N. C.
BRISKIN, GERALD JOFFREY A.B., University of Michigan	Psychology	Brooklyn, N. Y.
BRODHAG, ALEX EDGAR, JR. A.B., Oberlin College	Chemistry	Charleston, W. Va.
CAPWELL, RICHARD LEONARD A.B., Brown University; M.A., Yale University	English	East Greenwich, R. I.
CAMPBELL, RUTH B.A., Woman's College, University of North Carolina; M.A., University of North Carolina	Romance Languages	Greensboro, N. C.
CARPENTER, DEWEY K. B.S., Syracuse University	Chemistry	Scranton, Pa.
CASTOR, CHARLES ROBERT B.S., Baylor University	Chemistry	Concord, N. C.
CHERRY, LEONARD VICTOR B.S., College of the City of New York	Chemistry	New York, N. Y.
COLES, WILLIAM JEFFREY B.A., Northern Michigan College of Education	Mathematics	Ironwood, Mich.
COSTLOW, JOHN DEFOREST B.S., Western Maryland College; Associate in Arts Certificate, Maryland State Teachers College	Zoology	Baltimore, Md.

<i>Name</i>	<i>Department</i>	<i>Home Address</i>
CROWELL, ROBERT MERRILL A.B., M.A., Bowling Green University	Zoology	Canton, Ohio
DAVIS, WILMA MARVETTE B.S., Berea College	Economics	Colquitt, Ga.
DROZDOWSKI, EUGENE B.A., Alfred University; A.M., Duke University	History	New York, N. Y.
ESTHUS, RAYMOND ARTHUR A.B., Florida Southern College	History	Sarasota, Fla.
FISHER, WILLIAM DAVID A.B., Duke University	Zoology	Roxboro, N. C.
GABLE, RALPH WILLIAM B.S., University of Texas	Chemistry	San Antonio, Texas
GANYARD, ROBERT LOYAL B.A., M.A., University of Buffalo	History	Ashtabula, Ohio
GIRDNER, JOHN BYRON B.A., M.A., University of Utah	Psychology	West Bend, Wis.
GLAMAN, PAUL THOMPSON A.B., Grinnell College	English	Jewell, Iowa
GORIROSSI, FLORA E. B.A., Seton Hill College; M.S., Catholic University	Zoology	Greensburg, Pa.
GRAVES, ROBERT DORSET A.B., Grinnell College	English	Grinnell, Iowa
GRAYSON, WILLIAM CURTIS, JR. S.B., University of Chicago	Physics	Bay Springs, Miss.
HARTLE, DOUGLAS GRAHAM B.A., Carleton College	Economics	Ontario, Canada
HASSINGER, WILLIAM EDWARD, JR. B.S., Virginia Polytechnic Institute	Physics	Bristol, Tenn.
HERBERT, MARY ELOISE A.B., Winthrop College	Spanish	Piedmont, S. C.
HILL, ROBERT MATTESON A.B., Cornell University	Physics	Durham, N. C.
HOBBS, GRIMSLEY TAYLOR A.B., Guilford College; A.M., Haverford College	Philosophy	Chapel Hill, N. C.
HOWELL, JOHN MCDADE A.B., M.A., University of Alabama	Political Science	Fairfax, Ala.
HYLAND, KERWIN ELLSWORTH, JR. B.S., Pennsylvania State College; M.S., Tulane University	Zoology	York, Pa.
IVES, SIDNEY EDWIN A.B., Harvard University; M.A., Columbia University	English	High Point, N. C.
JACKSON, WILLIAM T. B.Sc., Ohio State University; M.S., University of Tennessee	Botany	Waverly, Ohio
JENSEN, CLAIR LEE A.B., Allegheny College	Sociology	New Cumberland, Pa.
KARDON, SAMUEL A.B., Emory University	Chemistry	Durham, N. C.
KEIRCE, WILLIAM FRANCIS B.M.E., M.A., University of Louisville	English	Louisville, Ky.

<i>Name</i>	<i>Department</i>	<i>Home Address</i>
KITCHEN, JULIAN BROOKS, JR. B.S., Virginia Polytechnic Institute	Chemistry	Suffolk, Va.
KLEIN, RAYMOND LOUIS B.S., Milwaukee State Teachers College; M.A., State University of Iowa	Education	Elkader, Iowa
LANDAU, LAWRENCE B.S., College of the City of New York	Chemistry	New York, N. Y.
LAPHAM, ANNE SOULE B.S., University of Rochester	Physics	Charleston, S. C.
LEAKE, PRESTON HILDEBRAND B.S., University of Virginia	Chemistry	Proffit, Va.
LOTT, PETER F. B.S., M.S., St. Lawrence University	Chemistry	Binghamton, N. Y.
LOWENHERZ, ROBERT JACK B.A., Queens College	English	Long Island City, N. Y.
MCCANDLESS, MARGARET SUSAN B.A., Winthrop College	Chemistry	Chester, S. C.
MCDERMOTT, ROBERT EMMET B.S.F., M.S., Iowa State College	Botany	Maywood, Ill.
McNURLEN, LEWIS J. B.A., M.A., Drake University	Sociology	Perry, Iowa
MACPHERSON, WITHROW CHASE B.A., University of Virginia	Romance Languages	Waynesboro, Va.
MANLY, JETHRO OATES B.S., College of William and Mary	Botany	Durham, N. C.
MASTROBATTISTA, JULIUS B.A., Drew University	Political Science	Morristown, N. J.
MULDROW, MARY FRANCES A.B., Georgia State College for Women; M.A., Duke University	Romance Languages	Milledgeville, Ga.
MULLEN, JOHN C. B.A., Wayne University; M.S., Alabama Polytechnic Institute	English	Durham, N. C.
NIELSEN, KAI EDWARD B.A., University of North Carolina	Philosophy	Chapel Hill, N. C.
NOBLE, LAWRENCE EVERMAN, JR. B.A., University of Mississippi	Political Science	Grenada, Miss.
PADGETT, LAWRENCE EDWIN B.A., University of Houston	English	Tazewell, Va.
POHRER, ROBERT GEORGE B.S., St. Louis University	Mathematics	St. Louis, Mo.
PORTER, BERNARD B.S., College of the City of New York	Chemistry	Bronx, N. Y.
POTTER, RICHARD AUSTIN B.S., Rollins College	Chemistry	Winter Park, Fla.
REECE, JAMES BRADY A.B., Johns Hopkins University; A.M., Duke University	English	Lenoir, N. C.
REICHERT, IRENE A. NASSAU A.B., University of Alabama	German	Boca Raton, Fla.
REID, ANN TOWNSEND A.B., Duke University	Mathematics	St. Augustine, Fla.

<i>Name</i>	<i>Department</i>	<i>Home Address</i>
ROBERTSON, CLYDE HENRY, JR. B.S., Wofford College	Zoology	Heath Springs, S. C.
ROSOFF, MORTON B.A., M.A., Brooklyn College	Chemistry	Brooklyn, N. Y.
SAVAGE, HELEN RUTH BARNES B.S., State Teachers College, Jacksonville, Ala.	Philosophy	Albertville, Ala.
SEIBERT, JULIEN CARL A.B., Franklin College	Sociology	Queens Village, N. Y.
SHEAR, WILLIAM MERRILL A.B., Ball State Teachers College	Political Science	Muncie, Ind.
SINCLAIR, PETER KIRK B.A., M.A., McGill University	Economics	Quebec, Canada
SLAUGHTER, GRIMES GIBBONS B.S., Duke University	Physics	New Bern, N. C.
SMITH, CALVIN CLIFTON A.B., Capital University	English	New Vienna, Ohio
SMITH, DONALD GEORGE B.A., McGill University	English	Ottawa, Canada
SMITH, LeROY WALTER B.A., The American University; M.A., George Washington University	English	Arlington, Va.
STALZER, ROBERT FREDERICK B.S., Kent State University; A.M., Duke University	Chemistry	Cuyahoga Falls, Ohio
STRAIN, EDWARD RICHARD, JR. A.B., Butler University	Psychology	Indianapolis, Ind.
SULZER, RICHARD LEE A.B., Duke University	Psychology	S. Norwalk, Conn.
TEETS, BRUCE E. A.B., Fairmont State College; M.A., West Virginia University	English	Terra Alta, W. Va.
THEUS, RICHARD BARRY B.S., Stetson University	Physics	Ocala, Fla.
THOMAS, RICHARD RUSSELL B.A., Western Reserve University	Psychology	Cleveland, Ohio
THOMPSON, EUGENE HESTER, JR. A.B., M.A., University of Kentucky	Romance Languages	Lexington, Ky.
TRAPNELL, EMILY ANNETTE B.A., Georgia State College for Women	Romance Languages	Milledgeville, Ga.
TUMBLIN, JOHN ADDISON A.B., Wake Forest College	Sociology	Newport News, Va.
WALLACE, JAMES NEILL A.B., A.M., Duke University	Mathematics	Pontiac, Mich.
WALLER, WILLIAM WASHINGTON B.S., Mt. Allison University	Zoology	Washington, D. C.
WALTER, WALDEMAR MELCHERT A.B., Harvard University	Zoology	Cambridge, Mass.
WALTON, WESLEY WILLS B.S., New Jersey State Normal School; M.Ed., Duke University		Woodlynne, N. J.
WISHNER, RAYMOND P. B.S., Northwestern University	Economics	Chicago, Ill.

<i>Name</i>	<i>Department</i>	<i>Home Address</i>
WITHROW, STANTON RAY B.S., Morris Harvey College; M.S., Northwestern University	Political Science	Charleston, W. Va.
WITT, FOUNTAIN JOEL B.S., Tennessee Polytechnic Institute	Mathematics	Whitwell, Tenn.
WOOLF, WILLIAM ERVIN B.A., M.A., Emory University	Physics	Elmhurst, Ill.
WORSHAM, JAMES ESSEX, JR. B.S., University of Richmond; M.S., Vanderbilt University	Chemistry	Newport News, Va.
YOUNG, JAMES JOSEPH A.B., Mercer University	Economics	Macon, Ga.
ZWEIFEL, PAUL FREDERICK B.S., Carnegie Institute of Technology	Physics	New York, N. Y.

## GRADUATE SCHOLARS

CARLTON, JOHN WILLIAM B.A., Baylor University; B.D., Duke University	Religion	Corpus Christi, Texas
CARROLL, KENNETH LANE A.B., B.D., Duke University	Religion	Easton, Md.
DANIELS, BOYD LEE B.A., College of Wooster; B.D., McCormick Theological Seminary	Religion	Sandusky, Ohio
DAVIS, RODNEY OLIVER B.S., Trinity College, Hartford	History	Hartford, Conn.
DOWNS, MURRAY SCOTT B.A., Randolph-Macon College	History	Springfield, Va.
FRYMIER, HOMER BURGWIN B.A., West Virginia University	Political Science	S. Charleston, W. Va.
HAUSMAN, CARL R. A.B., University of Louisville	Philosophy	Coral Gables, Fla.
HEGELAND, HUGO OSCAR B.M., University of Gothenburg	Economics	Gothenburg, Sweden
HUTT, PAUL JONES B.S., A.M., Columbia University	Psychology	Durham, N. C.
LUVAAAS, MORTEN JAY B.A., Allegheny College	History	Meadville, Pa.
MOORE, JACK WARREN A.B., Olivet Nazarene College; B.D., Duke University	Religion	Durham, N. C.
MURPHY, FREDERIC FRANCIS B.A., Milton College	Physiology	Jamesville, Wis.
RAMSEY, ROBERT WAYNE A.B., Duke University	History	Newport News, Va.
RATLIFF, CHARLES EDWARD, JR. B.S., Davidson College	Economics	Morven, N. C.
REVELEY, WALTER TAYLOR A.B., Hampden-Sydney College; B.D., Union Theological Seminary	Religion	Durham, N. C.
SCHALLER, HOWARD GRAHAM A.B., Duke University; M.A., Northwestern University	Economics	Auburn, Ala.
SHIH, CHUNG-WEN B.A., St. John's University, Shanghai; A.M., Duke University	English	Shanghai, China
SPERRY, WILLIAM HARTLEY A.B., Gettysburg College	History	Gettysburg, Pa.



## RESEARCH ASSOCIATES, FELLOWS, AND ASSISTANTS

## DEPARTMENT OF CHEMISTRY

## RESEARCH ASSOCIATES, OFFICE OF NAVAL RESEARCH

<i>Name</i>	<i>Home Address</i>
KANTOR, SIMON WILLIAM B.S., College of the City of New York; Ph.D., Duke University	New York, N. Y.
ROBINSON, JOHN E. B.S., M.S., Ph.D., Yale University	Oak Park, Ill.

## ALLIED CHEMICAL AND DYE CORPORATION FELLOW

TYCZKOWSKI, EDWARD A. B.Sc., Brown University	Apponaug, R. I.
--	-----------------

## AMERICAN ASSOCIATION OF UNIVERSITY WOMEN FELLOW

PITTS, ANNA B.A., Winthrop College; A.M., Mount Holyoke College	Seneca, S. C.
--	---------------

## AMERICAN CYANAMIDE COMPANY FELLOW

JOHNSON, RICHARD STEBBINS B.S., M.S., Illinois Institute of Technology	Maywood, Ill.
---	---------------

## CARBIDE AND CARBON CHEMICALS CORPORATION FELLOW IN ORGANIC CHEMISTRY

PUTERBAUGH, WALTER H., JR. B.A., Duke University	Johnstown, Pa.
---	----------------

## DEPARTMENT OF ARMY FELLOWS

PERRY, FRANCES HUNTER B.S., Wake Forest College	Durham, N. C.
PORTER, HARDIN KIBBEE B.S., University of Texas; M.S., Georgia Institute of Technology	Durham, N. C.

## DU PONT POST-GRADUATE FELLOW IN CHEMISTRY

MAN, EUGENE HERBERT B.A., Oberlin College	Scranton, Pa.
--	---------------

## ELI LILLY FELLOW

MANYIK, ROBERT MICHAEL B.S., University of California	Berkeley, Calif.
--	------------------

## INDUSTRIAL RESEARCH FELLOW

LAYTON, FRANK B.S., North Georgia College	Cartersville, Ga.
--	-------------------

## OFFICE OF NAVAL RESEARCH FELLOWS

CHEN, TIEN CHI B.Sc., Brown University	Hong Kong, China
GERVASI, JAY ANTHONY B.A., Cornell University	Brooklyn, N. Y.
HANCE, CHARLES ROBERT B.S., University of Illinois	Marengo, Ill.
WEINHEIMER, ALFRED B.S., M.S., Canisius College	Buffalo, N. Y.

## U. S. PUBLIC HEALTH SERVICE PRE-DOCTORAL FELLOW

JACKSON, WINSTON JEROME, JR. B.S., Virginia Polytechnic Institute	Kingsport, Tenn.
--	------------------

## SCHOOL OF MEDICINE

ESTABLISHED INVESTIGATOR, AMERICAN HEART ASSOCIATION

<i>Name</i>	<i>Home Address</i>
MOMMAERTS, W. F. H. M. M.A., University of Leiden; Ph.D., Klausenburg	Durham, N. C.

ATOMIC ENERGY COMMISSION POST-DOCTORAL FELLOW IN  
BIOCHEMISTRY AND NEUROSURGERY

WRENN, FRANK R., JR. A.B., M.D., Duke University	Anderson, S. C.
---	-----------------

ATOMIC ENERGY COMMISSION PRE-DOCTORAL FELLOW IN BIOCHEMISTRY

COHN, DAVID V. B.S., The College of the City of New York	New York, N. Y.
---	-----------------

U. S. PUBLIC HEALTH SERVICE PRE-DOCTORAL FELLOW IN BIOCHEMISTRY

PARRISH, ROBERT GUY B.S., University of Wisconsin	Eau Claire, Wis.
--	------------------

RESEARCH ASSISTANTS IN BIOCHEMISTRY

ARMSTRONG, FLORAPEARL B.S., University of Chattanooga	Chattanooga, Tenn.
--	--------------------

DRATZ, ARTHUR FREDERICK A.B., Duke University	Durham, N. C.
--	---------------

GLAID, ANDREW J., III B.S., M.S., Duquesne University	Pittsburgh, Pa.
--	-----------------

GREEN, IRVING B.S., New York University	Durham, N. C.
--	---------------

HAKALA, MAIRE TALLERVO M.A., University of Helsinki	Helsinki, Finland
--	-------------------

HUNTER, SYLVIA FISHMAN B.A., Brooklyn College; M.S., P.H., University of North Carolina	Brooklyn, N. Y.
--	-----------------

HEIMBERG, MURRAY B.S., M.S., Cornell University	Brooklyn, N. Y.
--	-----------------

LEDER, IRWIN B.A., Brooklyn College; M.S., New York University	Brooklyn, N. Y.
---	-----------------

RUPP, JOSEPH CHARLES B.S., Muhlenberg College	Allentown, Pa.
--	----------------

## DEPARTMENT OF PHYSICS

RESEARCH ASSOCIATES

BROWN, WILLIAM W. Ph.D., Cornell University	Durham, N. C.
--	---------------

LOWDIN, PER OLOF Ph.D., Uppsala University	Uppsala, Sweden
---	-----------------

GHOSH, SATYENDRA N. D.Sc., University of Calcutta	Calcutta, India
--	-----------------

GOOD, MYRON L. B.A., University of Buffalo	Buffalo, N. Y.
---	----------------

TRAMBARULO, RALPH F. Ph.D., Yale University	New Haven, Conn.
--	------------------

RESEARCH FELLOWS

ANDERSON, ROY STUART B.A., Clark University	Agawam, Mass.
--	---------------

<i>Name</i>	<i>Home Address</i>
BAILEY, JEB HARMON B.S., The Citadel	Charleston, S. C.
BEBOUT, DONALD EDWARD B.S., Case Institute of Technology	Boca Raton, Fla.
CRABLE, GEORGE FRANCIS B.S., Geneva College; M.S., University of Michigan	Ellwood City, Pa.
GREENHOW, CHARLES RICHARD B.S. in E.E., North Carolina State College; M.E.M., North Carolina State College	Covington, Ky.
HONES, EDWARD WHEELER B.S. in M.E., Duke University; M.A., Duke University	Durham, N. C.
JOHNSON, CHARLES MINOR, JR. B.E., Vanderbilt University	Nashville, Tenn.
KING, WILLIAM CONNOR B.A., Denison University	Granville, Ohio
LUCK, CLARENCE FREDERICK, JR. B.A., University of Buffalo	Buffalo, N. Y.
SASTRI, M. LAKSHMI N. B.Sc., M.Sc., Benares Hindu University	Madras Province, India
RESEARCH ASSISTANT	
GIBBONS, JOHN HOWARD B.S., Randolph-Macon College	Harrisonburg, Va.
GENERAL EDUCATION BOARD FELLOWS	
ROBINSON, HUGH GETTYS A.B., Emory University	Atlanta, Ga.
ROHRER, ROBERT HARRY B.S., M.S., Emory University	Atlanta, Ga.
SHELL FELLOW	
STEPHENSON, HAROLD PATTY B.S. in M.E., A.M., Duke University	Reidsville, N. C.
TEXAS FELLOW	
WILLIAMS, JOEL QUITMAN B.S., Centenary College; M.S., Georgia School of Technology	Heavener, Okla.
ATOMIC ENERGY COMMISSION FELLOW	
GOAD, WALTER BENSON B.S., Union College	Kinston, N. C.
FREDERICK GARDNER COTTRELL RESEARCH FELLOW	
MOCKLER, RICHARD CALVIN B.S., Northwestern University; M.S., University of Chicago	Wilmette, Ill.
DEPARTMENT OF PSYCHOLOGY	
UNITED STATES PUBLIC HEALTH PRE-DOCTORAL FELLOWS	
EDGERTON, JESSE WILBERT B.S., Guilford College; M.A., University of Florida	Pikeville, N. C.
PARSONS, OSCAR ALBERT A.B., M.A., Temple University	Durham, N. C.
VETERANS ADMINISTRATION PRE-DOCTORAL TRAINEES	
BARGER, BEN A.B., George Washington University	Durham, N. C.
BOWLES, WARREN A.B., M.A., University of Alabama	Birmingham, Ala.

<i>Name</i>	<i>Home Address</i>
BRAMLETTE, CARL ALLEN, JR. B.S., Presbyterian College	Laurens, S. C.
BRISKIN, GERALD JOFFREY A.B., University of Michigan	Brooklyn, N. Y.
COLVIN, RALPH WHITMORE B.S., Lawrence College	Appleton, Wis.
DUNN, WILLIAM LAWRENCE, JR. B.S., Lynchburg College	Richmond, Va.
FRIEDMAN, EDWARD LEONARD B.S., College of the City of New York	New York, N. Y.
GORDON, HIRAM LANDOR A.B., University of Wichita; A.M., University of Kansas	Morrilton, Ark.
HESTER, RUPORT B.A., Millsaps College; A.M., Columbia University	Mize, Miss.
LIVELY, MARY LOUISE GILL A.B., Woman's College, University of North Carolina; M.A., University of Minnesota	Laurinburg, N. C.
McMILLAN, JOHN JOHNSON B.A., Wake Forest College; A.M., Duke University	Wagram, N. C.
MICHAUX, WILLIAM WHITEHEAD A.B., University of North Carolina	Durham, N. C.
SNYDER, GILBERT B.S., University of South Carolina	Roanoke, Va.
STRAIN, EDWARD RICHARD, JR. A.B., Butler University	Indianapolis, Ind.
USSERY, LON ESKER B.A., University of Richmond	Wilmington, N. C.
WEBB, WARREN WRIGHT A.B., University of North Carolina	Salem, Va.
WEBSTER, JAMES CUMMING, JR. A.B., Yale University	Woodstock, N. Y.

# Admission



**T**O GRADUATE SCHOOL. A student who has received the A.B. or B.S. degree after a four-year program at an accredited institution may be admitted to the Graduate School. Ordinarily he must have made in his undergraduate work an average of not less than "B," or the equivalent, and he must not have concentrated excessively in one field of study to the detriment of a rounded program. He should have met substantially the requirements for the A.B. or B.S. degree at Duke University.

Before admission can be granted, the student must submit for appraisal the following documents: (a) An official transcript of all his college or graduate work, to be forwarded directly from the Registrar of his college to the Dean of the Graduate School at Duke University. (b) Three letters of recommendation, to be furnished by persons best qualified to judge the applicant as a prospective graduate student. Scores on the Graduate Record Examination are required before full admission can be granted. If possible, the student should take all three phases of this examination well in advance of his intended registration. Arrangements can usually be made through officials of the student's college, or by correspondence with the Educational Testing Service, 20 Nassau Street, Princeton, New Jersey. Should a student be unable to take the examination before the final admission date, he may—if his other documents are acceptable—be granted "provisional" admission until he takes the examination, which he must arrange to take at the first time it is offered after his "provisional" admission.

**APPLICATION PROCEDURE.** In order to make formal application to the Graduate School, the student should address the Dean of the Graduate School, Duke University, requesting official application blanks. These should be filled out fully, in duplicate, and returned at the earliest moment. The other documents needed to complete the application, namely, transcripts, letters of recommendation, and Graduate Record Examination scores, must be forwarded directly from the institutions or individuals to the Dean of the Graduate School. In no case will such documents be accepted from the student.

The application and all supporting documents must be submitted to the Dean of the Graduate School not later than August 1 by those applying for the fall semester, or January 1 by those applying for the spring semester. Applications received later than these dates can-



not be accorded the same review or consideration as those received earlier. It is the student's responsibility to make certain that his application is complete and in order before the dates specified.

When the application is accepted and approved, the student will receive a letter of admission, giving the date by which he must notify the Dean of the Graduate School of his intention to enroll for the term for which he is granted admission.

Admission, once granted, is valid only for the term or year specified. Should a student be unable to enter the Graduate School at that time but wishes later to be admitted to a subsequent term, he must re-apply for admission, following the usual procedure. But he need only bring his application up to date, if he re-applies within two years of the date when he was first admitted.

### *Registration*

Once the student has received notification of his admission to the Graduate School, but not until then, he may present himself for registration. During the registration periods, announced in the *Bulletin*, he first confers with the Director of Graduate Studies of his major department, who consults with him and prepares an Approval Card, listing the course work to be taken during the semester. The student then presents this Approval Card to the Graduate School representatives in the registration line, who enroll him officially in his courses.

**WHO MUST REGISTER.** (1) All students who enter course work or residence for credit; (2) all students who have completed minimum requirements for the Ph.D. degree, but are using in their research the facilities of the University; (3) all students who wish merely to "audit" a course or courses.

**LATE REGISTRATION.** All students are expected to present themselves for registration at the time stated in the *Bulletin*. *Those registering after the close of the announced registration period will be charged a late registration fee of five dollars.*

**ADMISSION TO CANDIDACY.** Admission to the Graduate School (outlined above) must not be confused with *admission to candidacy* for a degree. No student can be considered a candidate for the A.M. degree until he has received the approbation of the major department and has successfully completed a minimum of 12 semester hours of graduate courses at Duke. (See special statement regarding candidacy for the Ph.D. degree, p. 33.)

After completing these, he may apply (on an official blank for that purpose) for admission to candidacy. Two conditions must have been fulfilled: (1) he must have received passing grades on all of his 12 semester hours, and (2) he must have received a grade of "G" (good) on at least 3 of the 12 semester hours for which he was enrolled.

# Degrees Offered by the Graduate School



THE Graduate School of Arts and Sciences now offers the following degrees: The Master of Arts (A.M.), The Master of Education (M.Ed.), The Doctor of Philosophy (Ph.D.), and The Doctor of Education (Ed.D.).

## *The Master of Arts Degree*

**UNDERGRADUATE PREREQUISITE.** As a prerequisite to graduate study in his major subject, the student must have completed a *minimum* of 12 semester hours of approved college courses in that subject, and 12 additional semester hours in that subject or in related work. Since some departments require more than 12 semester hours, the student should read carefully the special requirements listed by his major department, which are included as headnotes to the course offerings in the *Bulletin*.

**LANGUAGE REQUIREMENTS.** The candidate for the A.M. degree must have a reading knowledge of at least one foreign language. (The several departments reserve the right to specify which foreign languages are acceptable.) Evidence of such knowledge may be furnished in either of two ways: (1) by successfully passing an examination, officially conducted by the appropriate foreign language department at Duke University, or (2) by a transcript showing the completion of the third college year of one language, or the second college year of each of two acceptable foreign languages.

If the student must take the examination to satisfy this requirement, he may request—should he feel well qualified—the language examination required of candidates for the Ph.D. degree. By passing this examination, he may satisfy the requirements in this particular language for both degrees at one time.

**MAJOR AND MINOR SUBJECT.** In his graduate work, the student, in order to complete the course requirements for the A.M. degree, must present acceptable marks for a minimum of 24 semester hours of graduate courses. Of these, at least 12 semester hours must be in the major subject.

Outside of his major, the student must take a minimum of 6 semes-

ter hours in a minor subject, the department of the minor to be approved by his major department. The remaining 6 semester hours of the necessary 24 may be taken in either of these departments, or in another approved by the major department and by the Graduate School Council. In addition to these he must present a thesis, which carries a credit of 6 semester hours. Thus, his earned credit for the degree totals a minimum of 30 semester hours. (Students who present 15 hours or more work taken in the Summer Session, should consult p. 49 for special requirements concerning course work.)

**RESIDENCE REQUIREMENTS.** The candidate for the Master of Arts degree must spend, as a *minimum*, one full academic year in residence at Duke University. Often more time will prove necessary, depending upon the nature of the student's research problem and upon the student himself. Students who earn more than 15 semester hours in Summer Sessions must meet a minimum residence requirement of thirty-three weeks (represented by a credit of thirty-three semester hours).

**TRANSFER OF CREDITS.** Under certain circumstances a maximum credit of 6 semester hours may be allowed for graduate courses completed elsewhere. The acceptance of credit up to this amount, however, will not reduce the minimum period of full-time registered residence at Duke University.

With the approval both of the student's major department and the Dean of the Graduate School, a student who is granted such transfer credit may be permitted to register for as much as 12 semester hours of thesis research instead of the usual 6 semester hours. Or he may be permitted to fill out his schedule with as much as 6 semester hours of further undergraduate training or 6 semester hours of required language courses on the undergraduate level. In no case will credit be allowed for extension or correspondence courses.

**TIME LIMITS FOR COMPLETION OF THE A.M. DEGREE.** The candidate for the A.M. degree must complete all of his course requirements and the thesis within a period of six calendar years from the date of his initial registration. Credits earned over a longer period of time cannot be credited toward a degree.

**THE THESIS FOR THE A.M. DEGREE.** The thesis for the A.M. degree should essentially demonstrate the student's ability to collect, arrange, interpret, and report pertinent material on his special research problem. Although a publishable document is not required, the thesis must be written in a literate style, and should exhibit the student's competence in scholarly methods and procedures.

**REGULATIONS AND PROCEDURES.** On or before November 15 of the academic year in which it is expected the degree will be conferred, the student must file with the Dean of the Graduate School,

on the official form, the title of the thesis. This title must have the approval of the Director of Graduate Studies in the major department, and of the professor under whose direction the thesis will be written.

The student who completes all his work for the degree and who expects to receive it at the regular commencement exercises in June, must so notify the Graduate School office before the March 15 preceding.

Four bound, typewritten copies of the thesis must be submitted, in approved form, to the Dean of the Graduate School on or before May 1 preceding the June commencement at which the degree will be conferred. The copies will then be distributed to the several members of the examining committee.

#### THE EXAMINING COMMITTEE AND THE EXAMINATION.

After consultation with the professor who has directed the thesis, the Dean of the Graduate School appoints an examining committee composed of the director of the thesis and two other members of the Graduate Faculty.

The candidate appears before this committee for examination, which usually is restricted to the thesis and to the major field, and which lasts for about one and one-half hours.

If the candidate successfully stands his examination, the examining committee certifies to his passing by signing the title page of the thesis. The candidate then returns the original and one carbon copy of the thesis to the Dean of the Graduate School, who deposits them in the University Library.

### *The Master of Education Degree*

**PREREQUISITE.** The degree of Master of Education is granted ordinarily only to teachers or to others engaged in educational work.

Before a student is admitted to graduate study for this degree, he must have completed, on the undergraduate level, a minimum of 18 semester hours of approved work in education, including courses in Educational Psychology, and courses in the History of Education, Educational Sociology, or School Administration.

Early in the program of his work, the student must successfully pass two examinations: (1) a test of general ability, and (2) a test designed to determine his ability to write acceptable English. The student, before the degree is conferred, must also present evidence testifying to at least two years of teaching experience, gained either before his admission to course work, or concurrently with it.

**REQUIREMENTS FOR THE DEGREE.** The M.Ed. degree may be earned either with or without the presentation of a thesis:

**WITHOUT THESIS:** Students who elect this plan must present a total of 30 semester hours of credit (those who take courses only in



Summer Sessions must present 33 semester hours). Twelve hours of this required work must include the *four* basic courses: Education 204, 210, 217, and 235. If a student, by examination, can demonstrate his competency in the subject matter of two of these courses, he may be granted exemption from the required work in these courses. In no case may he claim exemption for more than two.

Other requirements are: a departmental major (i.e., in Nursing Education, Elementary Education, Public School Administration, Public School Supervision, or Secondary Education) of at least 12 semester hours, and a minor of at least 6 semester hours in a department other than Education. Toward the end of his residence the student must pass a comprehensive examination on his departmental major and on the content of the four basic courses. Permission to take such examinations must be obtained from the Director of Graduate Studies of the Department of Education, and a notice of intention must be filed with him at least three weeks before the announced dates of the examination.

**WITH THESIS:** Students who elect this plan are permitted to substitute a thesis for 6 semester hours of the required course work (30 in winter; 33 in Summer Sessions). The first 15 semester hours (12 in the Summer Session) must be passed with a grade of "G" (good) on at least 6 semester hours, and with no grade below an "S." The student must also present a thesis subject approved by the Professor of Education who intends to direct it, and by two other members of the staff in Education, including the Director of Graduate Studies. Two of the three members of the approving committee must be permanent members of the Duke University Graduate Faculty. The title of the thesis must be filed with the Dean of the Graduate School at the same time as the titles for the A.M. theses (see p. 29).

In addition to the thesis, the student must present at least 24 semester hours of course credit (27 in Summer Session). Of these, 6 semester hours must be earned in *two* of the basic courses in the Department; Education 204, 210, 217, or 235. Of the remaining 18 or more semester hours, 6 semester hours must constitute a minor taken outside of the Department of Education; at least 12 semester hours must be taken in the student's departmental major.<sup>1</sup>

The examination on the thesis is similar to that for the Master of Arts degree (see above, p. 29).

All of the work in fulfillment of the requirements for the M.Ed. degree, whether done in Summer Sessions or in the regular academic year, must be completed within a period of six calendar years from the date of beginning.

<sup>1</sup> Those who expect to attend Summer Sessions should consult the statement on pages 48-49, regarding course requirements.



## *The Doctor of Philosophy Degree*

The Ph.D. degree is essentially a research degree. Although course work is a necessary part of the student's program, the mere accumulation of course credits will not be sufficient for attaining this degree. The granting of the Ph.D. is based primarily upon the student's knowledge of a specialized field of study and upon the production of an acceptable dissertation embodying the results of original research.

Before undertaking a program of advanced work toward the Ph.D., he should consult with the Dean of the Graduate School or the Director of Graduate Studies in his major department to determine the possibility of securing necessary instruction and supervision of research in his field of specialization.

**REQUIREMENTS FOR THE PH.D. DEGREE.** The formal requirements, discussed in detail below, for the Ph.D. degree are as follows: (1) foreign languages; (2) major and minor courses; (3) supervisory committee for program of study; (4) residence; (5) preliminary examination; (6) the dissertation; (7) the final examination.

**FOREIGN LANGUAGES.** Normally, a reading knowledge of both French and German is required. Such knowledge is evidenced by the passing of an examination conducted by the appropriate language department at Duke University, in cooperation with the student's major department (consult the calendar, page 5, for the fixed dates of these examinations).

With the permission of the major department, and with the approval of the Dean of the Graduate School, a student may be allowed to substitute for either of these another language which has a definite relation to the candidate's program of work for the Ph.D. degree. By rule of the Graduate Council, language examinations must be passed before a student takes his preliminary examination. Some departments require the student to master these languages early in the graduate program.

**MAJOR AND MINOR.** The student's program of study necessarily demands substantial concentration on courses in his major department. Enough work must be taken in one department other than the major department to constitute an acceptable minor. Exceptions which permit both the major and minor within the same department are allowed only by the special permission of the Dean of the Graduate School.

**COMMITTEE TO SUPERVISE THE PROGRAM OF STUDY.** Ordinarily, during the student's third semester of graduate work a supervisory committee of five members is appointed by the Dean of the Graduate School. This committee, with the professor who is to direct the student's research serving as chairman, formulates the pro-

gram of study, which is submitted to the Dean of the Graduate School for his approval. Of the five members, one must be from a department (usually the minor) other than the major department. This committee, with occasional necessary changes, serves also as the examining committee for both the preliminary and the final Ph.D. examinations.

**RESIDENCE.** The normal period of residence is not less than three full academic years beyond the B.A. or B.S. degree. A student who already has his A.M. degree may be allowed one year of residence for it, and thus will need to spend a minimum of two additional years in residence.\* In unusual cases, a student who has spent the first two years in residence at Duke University may be allowed to take his third year of residence at some other accredited institution. This can be done only with the approval of the major department and of the Dean of the Graduate School. It should be understood that either the first two years or the last year must be spent in actual residence at Duke. Occasionally, because of undergraduate deficiencies, a student may need to spend additional time beyond the minimum residence in preliminary courses, for which he will not receive residence credit, as a background for certain aspects of his graduate program.

Except in unusual cases, graduate work of fragmentary character taken over a long period of years, or work completed many years before the student becomes a candidate for the degree at Duke University, will not be accepted as satisfying the requirements of residence.

**CREDIT FOR SUMMER WORK.** Credit for a maximum of one year's residence may be granted for work completed in Summer Sessions with the approval of the major department and of the Dean of the Graduate School. A full schedule of summer courses, carried for six weeks, constitutes one-fifth of a year's residence credit.

**PRELIMINARY EXAMINATION.** Near the end of the second academic year of graduate work (or in special cases early in the third year) the student must take his preliminary examination, which ordinarily covers the field of both his major and minor. Conducted by his Supervisory Committee, the examination is oral, or written, or both, as determined by the Committee. *Upon passing this examination, and not until then, the student is accepted as a candidate for the Ph.D. degree.* Transfer students who may already have passed a preliminary examination at another university must nevertheless take the examination at Duke.

**PRIVILEGE OF RE-EXAMINATION.** Should the student fail the preliminary examination, he may apply, with the consent of his Supervisory Committee and of the Dean of the Graduate School, for the privilege of a second examination to be taken no sooner than six

\* See page 37 for rules regarding transfer of graduate credit.

months after the date of the first. Failure on the second examination will render the student ineligible to continue his program for the Ph.D. degree at Duke University.

**THE DISSERTATION.** The dissertation is expected to be a mature and competent piece of writing, embodying the results of significant and original research. It must be, in essence, a contribution to knowledge.

The subject for the dissertation must receive the written approval of both the Director of Graduate Studies of the student's major department and of the professor who directs the dissertation. The title of the dissertation must be filed with the Dean of the Graduate School on or before October 15 preceding the June commencement at which the degree is expected to be conferred.

The dissertation must be completed to the satisfaction of the professor who directs it; and four bound, typewritten copies in approved form must be deposited with the Dean of the Graduate School on or before April 15 if the degree is to be granted at the June commencement following.

The dissertation must be typed on standard paper specified by the Graduate Council and bound in approved form. The form of the title page must be approved by the major department and by the Dean of the Graduate School.

At the end of each of the four bound copies should be included a biographical sketch of the author of the dissertation.

After the final examination the original and the first carbon copy of the finally approved dissertation are returned to the Dean of the Graduate School, who deposits them in the University library.

**DISSERTATION FEE AND PUBLICATION REQUIREMENT.** The candidate must deposit not later than the May 1 before the degree is conferred, with the Treasurer of the University, a dissertation fee of \$50.00. Should the dissertation be published in a form satisfactory to the professor under whom it was written, and to the Dean of the Graduate School, within a period of three years from the date of the degree, the deposit fee will be returned to the student.

Ten copies of each published dissertation must be deposited with the Dean of the Graduate School, as provided by the regulation of the Graduate School Council. A suitable abstract of one or more articles in published form may be accepted as satisfying the publication requirements. Ten copies of each of these must be deposited with the Dean of the Graduate School.

If the dissertation is not published within a three-year period under the conditions stated above, the deposit fee is forfeited and is credited to a Special Dissertation Fund, which is used for subsidizing the pub-

lication of such dissertations as are recommended by the Graduate School Council.

**FINAL EXAMINATION.** The final oral examination covers the dissertation and the related subject matter in major and minor fields. Normally, one year must elapse between the dates of the preliminary and the final examinations.

If a student fails his final examination, he may be allowed to take it for a second time, but not sooner than six months from the date of his first. Permission to take the second examination must be obtained from the professor who directed the dissertation and from the Dean of the Graduate School. Failure to pass the second examination renders the student ineligible to continue work for the Ph.D. degree at Duke University.

### *The Doctor of Education Degree*

The Doctor of Education is a professional degree and is granted only to those who are, or intend to become, public school administrators.

**ADMISSION.** The candidate for the Ed.D. degree must meet the same requirements for admission to the Graduate School as the candidate for the Ph.D. degree. In addition to these uniform requirements, the candidate for the Ed.D. (1) must have had at least three years of experience in public school work, preferably in school administration; (2) must make a satisfactory mark on a psychological examination, and demonstrate, by examination, his ability to write good English; (3) must present strong letters of appraisal and recommendation from persons well qualified to speak with authority of his abilities; and (4) must present himself, if possible, for a personal interview. The Standing Committee on the Ed.D. degree reserves the right to insist upon an interview.

**RESIDENCE.** The residence requirements for the Ed.D. degree are the same as those for the Ph.D. (see p. 33).

**ACCEPTABLE MARKS ON FIRST YEAR'S WORK.** In order to be considered for candidacy for the Ed.D. degree, the student must have passed all of his course work in the first year of graduate study; on at least 9 semester hours he must have made a grade of "G" or better.

**PRELIMINARY EXAMINATION.** By the end of his second year of residence the candidate for the Ed.D. degree will take a preliminary examination similar in scope to that described for the Ph.D. degree (see above, p. 33). Only after he passes this examination, will he be considered a candidate for the degree.



**DISSERTATION AND FINAL EXAMINATION.** The candidate must write a dissertation which demonstrates his ability to investigate and report on some significant phase of public school administration. The details of dissertation presentation, including its defense in a final examination, are the same as those for the Ph.D. degree (see p. 34).

**AWARDING OF THE DEGREE.** After the completion of the formal academic requirements for the Ed.D. degree, the candidate must devote at least one year of apprenticeship in a public school system, under conditions which assure appropriate supervision of the candidate's activities. The Standing Committee on the Ed.D. degree will decide the adequacy of this training. The degree will not be formally awarded until after the successful completion of this apprenticeship.

**PROGRAM OF WORK.** The details of the program of work are determined for each candidate by the Standing Committee for the Ed.D. degree. In general, the first year of work follows the program laid down for the M.Ed. degree. In the second and third years, work in Public School Administration is organized on the basis of seminars, rather than separate courses. This professional, specialized study accounts for about one-third of the course work. The other two-thirds is divided almost equally between the general field of Education and related work.

**MAJOR AND MINOR.** The major field is Public School Administration. The minor, or related work, amounting to at least 24 semester hours, must be taken in Economics, Political Science, or Sociology. Courses necessary for the student's program which lie outside these fields must receive the approval of the Standing Committee.

### *General Regulations*

**SIZE OF CLASSES.** Classes which carry graduate credit are limited in size to twenty-five students. In exceptional cases this regulation may be modified, but only by permission of the Executive Committee of the Graduate Council on the recommendation of the department concerned.

**GRADING OF GRADUATE STUDENTS.** Grades in the Graduate School are as follows: "E," "G," "S," "F," and "Inc." "E" (exceptional) is the highest mark. "G" (good) and "S" (satisfactory) are the remaining passing marks. "F" (failing) is below passing, and "Inc." (incomplete) indicates that some portion of the student's work is missing, for a satisfactory reason, at the time the grades are made out. The professor who gives an "Inc." specifies the date by which time the student must have made up the deficiency. In no case may



an extension be granted beyond one calendar year from the date the course ended. No residence credit can be granted for that portion of a student's program which lapses because of incomplete marks.

**CHARGE FOR REQUESTED TRANSCRIPTS.** A student who wishes to transfer his credits from Duke University to another institution is entitled to one free transcript of his record. A fee of one dollar, payable in advance, is charged for each additional copy.

**TRANSFER OF GRADUATE CREDITS.** Credit for graduate course work earned at another institution will be determined only after a student has spent one semester at Duke University. After completing his first semester, the student should file a request that his credits be reviewed and a decision made.

**WITHDRAWAL FROM GRADUATE SCHOOL.** If a student wishes to withdraw from the Graduate School, he should notify both the Director of Graduate Studies in his major department and the Dean of the Graduate School.

**GRADUATE CREDIT EARNED BEFORE A.B. DEGREE IS GRANTED.** Ordinarily no credit for graduate courses earned before a student has been awarded his A.B. or B.S. degree will be allowed. However, an undergraduate student at Duke University, who, at the beginning of a semester, lacks no more than 9 semester hours for fulfilling the requirements for the A.B. or B.S. degree, may obtain permission from the Dean of the Graduate School to enroll for graduate courses sufficient to bring his total program to fifteen hours a week. Such graduate courses will be credited toward the A.M. or M.Ed., provided that the student is duly registered in the Graduate School at the beginning of that term and that he meets the requirements for admission to the Graduate School.

### *Fellowships, Scholarships, and Assistantships*

For the encouragement and financial assistance of graduate students of high character and marked ability, Duke University has established a considerable number of fellowships, scholarships, and assistantships. The stipends for these range from \$450 to \$1,700. Holders of grants pay tuition and other fees regularly required of all graduate students.

Fellows and scholars pay full tuition and fees and are registered for a full schedule of course work and receive full residence credit. Assistants pay four-fifths tuition and fees, are registered for a four-fifths schedule, and receive four-fifths residence credit.

**APPLICATION FOR GRANTS.** Applications for these grants, along with all supporting documents, must be submitted on or before March 1. Notification of awards is made approximately on April 1.

Late applications will be considered, should any vacancies occur in the list of appointees. No appointment is made for longer than one academic year.

Further information and application forms may be obtained from the Dean of the Graduate School, Duke University.

Grants offered for 1951-52 are:

#### FELLOWSHIPS

One Angier Duke Memorial Fellowship of \$1,600.

Twelve University Fellowships with stipends varying from \$1,050 to \$1,500.

Twelve University Fellowships with stipends varying from \$950 to \$1,200.

Three Gurney Harriss Kearns Fellowships in Religion of \$1,000 each.

#### GRADUATE ASSISTANTSHIPS

Approximately eighty additional appointments as teaching assistants or readers will be available for graduate students. The compensation will usually range from \$800 to \$1,700 depending upon the nature and amount of the work assigned.

#### GRADUATE SCHOLARSHIPS

Fifteen scholarships with stipends varying from \$450 to \$800 each.

##### CHARLES W. HARGITT RESEARCH FELLOWSHIP IN ZOOLOGY

The Charles W. Hargitt Fellowship in Zoology is limited to research in the field of cellular studies. It is primarily for post-doctoral applicants who desire to engage in full-time research. The stipend will range upward from a minimum of \$3,000 depending upon previous training and experience.

The fellowship may occasionally be granted to a pre-doctoral candidate in his last year, whose research gives promise of being of unusual merit. The stipend in this case will range from \$1,800 to \$2,400.

Appointment is for one year with the possibility of reappointment. Inquiries and applications should be made to Dr. C. G. Bookhout, Department of Zoology, Duke University, Durham, North Carolina.

##### FELLOWSHIPS AND GRADUATE SCHOLARSHIPS IN FORESTRY

Information regarding special fellowships and graduate scholarships in forestry may be obtained from the Dean of the School of Forestry, Duke University, Durham, North Carolina.

## SIGMA XI PRIZE AWARDS

The Society of Sigma Xi offers each year a prize for a Master's thesis and a prize for a Ph.D. dissertation in the fields of Botany, Chemistry, Forestry, Mathematics, Medicine, Physics, Psychology, and Zoology. The student must be in residence during the academic year in which the prize is awarded. Students holding graduate appointments are eligible to compete, but instructors, part-time instructors, and interns are not eligible. The department concerned makes the nomination. Full particulars may be obtained from the secretary of the chapter. Nominations, recommendations, copies of theses, reports, or other materials must be in the hands of the secretary on or before May 1. All papers should be submitted in duplicate.

*Tuition, Fees and Expenses*

## GENERAL FEES IN THE ACADEMIC YEAR

The following table shows the general fees and charges collected from all students. All fees for each semester are due and payable, unless otherwise specified, at the time of registration at the beginning of that semester. No student is admitted to classes until arrangements have been made with the Treasurer of the University for the settlement of fees.

Tuition, per semester.....	\$175.00
General Fee,* per semester.....	60.00
Athletic Fee, not including Federal Tax, Optional, per semester.....	5.00
Room-rent—See detailed statement below.	
Special Dissertation Fee, payable by candidates for the Ph.D. degree, on or before the May 1 preceding the granting of the degree.....	50.00

## ROOMS

On the West Campus a new graduate center is in process of construction and will be occupied during 1951-52. With rooms, lounges, dining halls and recreation areas, it will accommodate approximately four hundred men. Women graduate students occupy a newly remodeled Epworth dormitory on the East Campus, which accommodates between fifty and sixty students. Rooms, both on the Woman's College Campus and on the West Campus, are supplied with all necessary furniture. The student should plan to provide his own towels, sheets, pillows, pillowslips, bedcoverings, and table lamp.

\* General Fees, in lieu of most special charges, include the following fees: Matriculation, Medical, Library, Damage, Commencement, Diploma, and an average of the Laboratory and Materials Fees.

Rooms in Few Quadrangle, now being used to house graduate men, rent at \$125.00 per semester for a room for two persons, and \$87.50 for a single room. Rooms for graduate women in Epworth Hall rent at \$125.00 per semester for a room for two persons, and \$87.50 for a single room.

Rooms are reserved only for students who have been officially admitted to graduate courses by the University. They are rented for no shorter period than one semester. The occupancy of a room for less than one semester will be charged at the rate of one dollar each day unless the student makes the necessary arrangements with the Housing Bureau before occupying the room. The minimum charge is \$25.00. Application for rooms should be made to the Housing Bureau, Duke Station, Durham, N. C. A room reservation fee of \$25.00 is required for a definite room assignment. The reservation fee is deducted from the room charges at the time of registration. Those who make application and are accepted will not be entitled to have the reservation fee refunded unless the request for refund is made at last 60 days prior to the date for registration for the semester. Early application for a dormitory room is essential if the student wants to be assured of living accommodations on the campus.

A resident student who wishes to retain his room for the succeeding semester must pay a reservation fee of \$25.00 on or before an announced date. All rooms which have not been reserved by that date will be considered vacant for the succeeding semester. When a room is once engaged by a student, no changes will be permitted except with the consent of the Housing Bureau.

Graduate students are required to observe the same general regulations as undergraduates with respect to the use of the rooms. Leaving one room and occupying another without permission is strictly forbidden and will render the offender liable to a charge for both rooms for the entire semester. No occupant is permitted to rent or sublet a room to another occupant. The use of a room for merchandising of any kind is not allowed.

The University does not assume the responsibility for the personnel selected as roommates, though it will gladly render any assistance possible in the matter.

## BOARD

Food service on both the Woman's College Campus and the West Campus is cafeteria style. The cost of meals approximates \$1.50 to \$2.00 per day depending upon the need and taste of the individual. The dining facilities on the West Campus include three cafeterias with multiple choice menus and, in addition, the Oak Room where full meals and *a la carte* items are served.

## ESTIMATED EXPENSES IN THE ACADEMIC YEAR

The necessary expenses of a graduate student are moderate. The University dormitories and Unions provide comfortable and wholesome living conditions at a minimum cost. Incidental expenses for recreation, traveling, clothes, and other items naturally depend on the tastes and habits of the individual. The table below lists the necessary college expenses for one year for a full program of work:

	<i>Low</i>	<i>Moderate</i>	<i>Liberal</i>
Tuition .....	\$350.00	\$ 350.00	\$ 350.00
General Fee .....	120.00	120.00	120.00
Room-rent .....	100.00	125.00	175.00
Board .....	350.00	400.00	450.00
Laundry .....	25.00	30.00	35.00
Books .....	22.50	30.00	45.00
	<hr/> \$967.50	<hr/> \$1,055.00	<hr/> \$1,175.00

Due to rising costs it may be necessary to consider some readjustment of charges. In the event of an adjustment applicants will be notified.

## PAYMENTS TO HOLDERS OF GRANTS

Payments of stipends to holders of grants are made by the University Treasurer in four equal installments. Arrangements may be made to pro-rate tuition charge on this same basis. Payments are made to the student at approximately the middle and end of each semester.

## SPECIAL CHARGES FOR TEACHERS AND OTHERS

In order to assist North Carolina teachers in their professional preparation, Duke University grants a special tuition rate to members of the faculties of neighboring public schools and colleges.

A teacher regularly employed and teaching while taking courses in the Graduate School of Arts and Sciences may enroll for one or two courses (in no case totalling more than 7 semester hours per semester) upon the payment of a fee of \$5.00 for registration for each semester and a tuition fee of \$5.25 per semester hour of credit.

These special fees do not apply to the holders of fellowships, scholarships, or assistantships, nor to teachers on leave of absence from their institutions. To qualify for such fees a teacher must be currently employed in his profession.

Other persons eligible for these special fees include employees of Duke University who are paid on a monthly basis throughout the year, ministers of neighboring churches, and wives of Duke faculty members.

The student must meet the same admission standards required of all graduate students (see above, p. 26). No more than two-fifths residence credit per year may be earned under this provision.



## *The Libraries*

The University Libraries contain 1,025,000 volumes. In addition to the collections in the General Library, there are eight school and departmental libraries: Divinity, 48,041 volumes; Engineering, 14,240 volumes; Law, 91,642 volumes; Medical, 49,445 volumes; Woman's College, 82,796 volumes; Biology-Forestry, 41,901 volumes; Chemistry, 14,144 volumes; Mathematics-Physics, 13,488 volumes. Between 30,000 and 40,000 volumes are added annually to the collections, and 3,600 periodicals and seventy newspapers are received currently.

The General Library building, which was doubled in size in 1949, incorporates many modern arrangements for the preservation of the collections and for the convenience of the research scholar. Book stacks, storage areas, and quarters for rare books and manuscripts are air-conditioned. In the stacks, 250 carrells are available to graduate students as places of study, and a large reading room on the first floor of the building is reserved for graduate students. Upon application, graduate students may receive permit cards entitling them to use of the stacks.

A division of photographic services, with the most modern cameras and other equipment for microfilming or other photographic reproduction of printed and manuscript materials, provides a battery of reading machines to serve the Library's large collection of microfilms of rare books, periodicals, and newspapers.

The extensive resources of the Library for research students may be suggested by the following special collections:

THE TRENT COLLECTION OF WALT WHITMAN, containing the first and all other important early editions or issues of *Leaves of Grass*; books and articles of Whitman biography and criticism; nearly 300 manuscripts and 400 letters; and pictures, sheet music and other miscellanea.

THE GEORGE WASHINGTON FLOWERS COLLECTION of books, manuscripts, pamphlets, and newspapers on all phases of Southern history.

THE ARENTS COLLECTION of several hundred volumes relating to the culture and production of tobacco and the manufacture and distribution of tobacco products.

THE JAMES A. THOMAS COLLECTION of books on Chinese history and culture.

THE GUIDO MAZZONI LIBRARY, a collection of approximately 23,000 volumes and 67,000 pamphlets covering the whole range of Italian literature, with special strength in the nineteenth century.

THE GUSTAVE LANSON LIBRARY of 12,000 books and monographs on French literature.

LATIN-AMERICAN COLLECTIONS, built around a special Peruvian library of 7,000 books and manuscripts, a Brazilian library of several thousand volumes, and an Ecuadorian library of 2,000 volumes, supplemented by strong collections of the public documents of these and other Latin-American countries.

THE ROBERTSON LIBRARY of Philippiniana.

THE FRANK C. BROWN FOLKLORE COLLECTION, consisting of about 38,000 manuscript pieces, 1,400 vocal recordings, and 650 musical scores of North Carolina folklore.

THE STRISOWER LIBRARY of International Law, numbering about 5,000 volumes, with many rare books and periodical files.

THE HOLL CHURCH HISTORY LIBRARY, dealing primarily with the period of the Reformation.

COLLECTIONS IN ENGLISH AND AMERICAN LITERATURE, where emphasis has been placed principally on the eighteenth and nineteenth centuries, with collections of Swinburne, Tennyson, Rossetti, and Bryant, significant groups of annotated copies and first editions of Coleridge and Byron, the Carroll Wilson collection of Emerson, some 5,000 items of eighteenth-century English poetry and prose, and the Paul Hamilton Hayne library of American literature.

In addition to these and other special collections, the Libraries contain excellent files of United States federal and state documents, public documents of many European and Latin-American countries, and publications of European academies and learned societies. The newspaper collection, with 13,000 volumes and 2,000 reels of microfilm, has several long eighteenth-century files, strong holdings of nineteenth-century New England papers, and of ante-Bellum and Civil War papers from North Carolina, South Carolina, and Virginia; there are also many European and Latin-American papers. The manuscript collection of more than 1,250,000 items is particularly strong in all phases of the history, politics, and social and economic life of the South Atlantic region, though it includes also significant papers in English and American literature, and several notable mediaeval manuscripts in both Greek and Latin.

#### HISPANIC STUDIES PROGRAM

The Graduate School offers an inter-departmental program of Hispanic studies leading to the A.M. and Ph.D. degrees. Students may write their theses and take their degrees in history, economics, political science, sociology, and Hispanic languages and literatures. The purpose of the program is to make possible desirable combinations of courses on the Hispanic world in these related disciplines and to bring to bear more strength of the faculty upon the training of a

single candidate. This may be achieved through a judicious use of minors or by such special arrangements as may from time to time become necessary.

The Duke University Library holdings have been built up to facilitate graduate work and research in Hispanic-American cultural history, inter-American relations, economic history, politics, and Spanish-American literature. These collections were augmented by a grant from the Division of Humanities of the Rockefeller Foundation during the period 1940-1946 and are being constantly enlarged through liberal appropriation of University funds.

## *Science Laboratories*

### BOTANICAL AND ZOOLOGICAL LABORATORIES

Facilities for graduate study in the Departments of Botany and Zoology are for the most part concentrated in the Biology Building on the West Campus. In addition to well-equipped laboratories for teaching and research in the various fields of botany and zoology, special facilities, such as animal rooms, greenhouses, darkrooms, a small shop, a refrigerated room, and an air-conditioned room are available.

The Botany herbarium, containing over 125,000 specimens, is particularly strong in material from the Southeast and includes notable collections of mosses, ferns, and grasses. The Biology-Forestry Library contains an outstanding collection of books and serials, including most of the important American and foreign periodicals, in botany, forestry, zoology and related fields.

Unique assets for teaching and research are the Sarah P. Duke Gardens, conveniently accessible on the West Campus; the Duke Forest, comprising some eight thousand acres of woodland adjacent to the West Campus; and the Duke University Marine Laboratory at Beaufort, North Carolina. The marine station is exceptionally well located for the study of animal and plant life in the ocean and in the coastal plains area. Graduate courses of instruction are given at the Marine Laboratory during the summer months; research facilities are available throughout the year.

Scholarships for advanced study during the summer months are maintained at the Highlands Laboratory, Highlands, North Carolina, and at the Marine Biological Laboratory, Woods Hole, Massachusetts. Requests for information concerning the scholarship at the Highlands Laboratory should be addressed to the Botany Department or the Zoology Department, those concerning scholarships at Woods Hole to the Zoology Department.

## PHYSICAL LABORATORIES

A new and completely modern Physics building, with 62,500 square feet of floor space, has recently been completed.

In addition to the lecture halls and the elementary laboratories, the building includes special laboratories for work in electrical measurements, electronics, microwaves, optics, atomic physics, and mechanics, and a new laboratory for training in radioactive measurements. Special equipment includes: a 21-foot concave grating and other instruments for visible, ultraviolet, infrared, and Raman spectra; instruments for research in microwaves and microwave spectroscopy; crystal counters, proportional counters, ion chambers for use in cosmic ray and nuclear research. A four-million volt Van de Graaff accelerator is scheduled for delivery in the fall of 1951.

The Physics building contains a departmental library, a liquid air plant, and shop staffed by four instrument mechanics, two electronic mechanics, and a glass blower.

## CHEMICAL LABORATORIES

Graduate work in chemistry is carried on in a modern building with a floor area of about 57,000 square feet. Of this total space a large proportion is available for research and advanced teaching. There are twenty-five double research rooms completely equipped with the usual services. In addition, a number of specially designed rooms are available for present or future research, such as a photographic room, constant temperature room, distillation room, and rooms equipped for dielectric constant and magnetic measurements.

A glassblowing room and a well-equipped shop, operated by a competent mechanic, provide facilities for the construction of special apparatus and for the repair and maintenance of instruments.

## MEDICAL SCHOOL

In the School of Medicine elaborate facilities are provided for post-graduate research in the various branches of medical science. The Departments of Anatomy, Bacteriology, Mycology, and Immunology, Biochemistry and Nutrition, and Physiology and Pharmacology offer certain courses and research facilities to students in the Graduate School of Arts and Sciences. The use of the Duke Hospital Library is available to all graduate students.

*Oak Ridge Institute of Nuclear Studies*

Duke University is one of the sponsoring universities of the Oak Ridge Institute of Nuclear Studies located at Oak Ridge, Tennessee. Through this cooperative association with the Institute, the graduate



research program has at its disposal all the facilities of the National Laboratories in Oak Ridge and of the research staffs of these laboratories.

### *Duke Forest*

The Duke Forest consists of approximately eight thousand acres of land, most of which is adjacent and easily accessible to the University campus. Situated in the lower Piedmont region and composed of second-growth shortleaf pine, loblolly pine, and hardwoods, the Forest is representative of the various types of timber growth and soils found throughout the region. Through placing the Forest under intensive management for forestry purposes, substantial progress has been made in developing the educational work and research in forestry.

The proximity of the Forest to the laboratories, greenhouses, and library facilities of the University provides an excellent opportunity for advanced study and research in forestry. Research, particularly in the fields of silvics, forest soils, silviculture, forest management, properties of wood, forest-tree physiology, forest entomology, and forest pathology, is well under way. Several members of the Botany and Zoology staffs are also engaged in research in the Duke Forest.

### *Cooperative Programs With the University of North Carolina*

INTERCHANGE OF REGISTRATION. Under an experimental plan of cooperation between the greater University of North Carolina and Duke University, students regularly enrolled in the Graduate School of the greater University during the regular academic year, and paying full fees to that institution, may be admitted to courses in the Graduate School of Duke University upon payment of a nominal registration fee of two dollars and of any other special fees regularly required of all students. Under the same arrangements, students in the Graduate School of Duke University may be admitted to course work at the greater University of North Carolina.

LIBRARY EXCHANGE. Students of both the University of North Carolina and Duke University are granted certain library privileges in the respective libraries of each University. Books unavailable in one library may be procured at short notice through an inter-library loan service.

### *Research and Publication*

The several departments of the University are devoted to research investigation as well as to instruction. Since the University exists



partly for the promotion and diffusion of knowledge, attention is rightly placed, in the Graduate School, on research activities.

In furtherance of the University's obligation to promote and diffuse knowledge, the President annually appoints a University Council on Research, which receives applications from members of the various faculties for subsidies in support of research. Vigorous and forward-looking policies of this Research Council have initiated and encouraged the completion of many substantial and important research projects.

The Duke University Press takes its place as a significant agency in the diffusion of knowledge. Created in 1926, as a successor to the Trinity College Press, the Duke University Press immediately revived the *Hispanic-American Historical Review*, which had been founded and published from 1918 to 1922 by a group of scholars interested in Hispanic America. In 1929 *American Literature* was begun with the cooperation of the American Literature Group of the Modern Language Association. This journal was followed in 1931 by *Ecological Monographs*, and in 1932, *Character and Personality* (since 1945 the *Journal of Personality*). In 1935 the Press began the publication of the *Duke Mathematical Journal*; in 1937, the *Journal of Parapsychology*. The Law School of Duke University publishes *Law and Contemporary Problems*.

The Press, since its organization, has published more than two hundred volumes, and has thus made public the fruits of scholarly research of the Duke faculty and of scholars elsewhere. In the broadest sense, the policy of the Press is to make available to the public any scholarly work that merits publication, though special attention is given to works in domains of knowledge cultivated by the University and to works pertaining to the region south of the Potomac.

### *Appointments Office*

Duke University maintains an active appointments office which has steadily been placing students in teaching and industrial positions. The services of this office are available without charge to graduate students. Those who are interested in securing employment through the Appointments Office, or those who wish to have available for their own use in securing employment a complete file containing their academic record and pertinent recommendations, should register in this office.

### *Foreign Students*

It is the policy of the Graduate School to admit qualified foreign students to course work and in many instances to candidacy for a

degree. In making application the student should follow the same procedures as are required of all other graduate students.

The foreign student whose native language is not English must submit, with his application, a statement by a qualified official that the applicant can read, write, speak, and understand English well enough to pursue a program of graduate study. If the applicant is deficient in this respect, he must remove his deficiency before he can be accepted in the Graduate School. He must also present a statement certified by a responsible official that his finances are sufficient to maintain him during his stay at Duke University. Unless specific arrangements have been made for a scholarship, the student must pay the regular fees.

A foreign student who comes to the United States on a 4 (e) visa must register at the college or university for which the visa was obtained. If a student wishes to transfer from another American university to Duke University, he must present to his District Immigration Office a statement from the university he has been attending, certifying that he has carried a full program of work and agreeing to the transfer to Duke University. The foreign student must expect to register for a full program of graduate work, unless specific arrangements have been made for a partial program.

### *Graduate Study in the Summer Session*

The Summer Session of Duke University is divided into two terms of six weeks each. In 1951, the first term begins on June 12 and ends on July 21. The second term begins on July 21 and ends on August 31.

Graduate students who wish to work toward advanced degrees in the Summer Session, particularly in Chemistry, Economics, Education, English, History, Mathematics, Religion, Sociology, Spanish, and Zoology will find a wide selection of courses offered by members of the Duke faculty and by visiting professors. Other departments ordinarily offering sequences of work leading to the A.M. degree are Botany, Political Science, and Psychology.

Requirements for admission to the Graduate School are detailed above, p. 26. Students who wish to be admitted to the Graduate School for work in the Summer Session, should make application to the Dean of the Graduate School, as well as to the Director of the Summer Session, and should return the completed application, with supporting documents, before June 1, for admission to the first term, and before July 10, for admission to the second term.

REGULATIONS REGARDING SUMMER WORK. (a) No graduate student may register for more than six semester hours of credit in one Summer Session term of six weeks. (b) Students who

present more than 15 semester hours of work earned in the Summer Session toward either the A.M. or M.Ed. degree must meet a minimum residence requirement of 33 weeks. (c) All of the work required for either the A.M. or M.Ed. degree must be completed within six years of the date of beginning. No work completed earlier than this time limit can be accepted either for course or residence credit. (d) Not more than one year of summer work can be accepted toward the residence requirements for the Ph.D. degree. See p. 33 for a definition of a year's residence credit earned in summer sessions.

A Summer Session Bulletin containing information about graduate courses may be obtained by addressing a request to the DIRECTOR OF THE SUMMER SESSION, Duke University, Durham, N. C.

# Courses of Instruction



*Most courses listed in this Bulletin are given on the West Campus. The letter (E) following the description means that that course is offered on the East Campus. In general, courses with odd numbers are offered in the first semester, those with even numbers in the second semester. The courses listed under the headnote to the several departments are those planned at the date of printing the Bulletin. Occasional changes may later be necessary.*

## AESTHETICS, ART, AND MUSIC

PROFESSOR KATHARINE GILBERT, CHAIRMAN—100 ASBURY BUILDING; ASSISTANT  
PROFESSOR MARKMAN

No graduate degree is offered in this department, but the following courses are suggested as possible minors for students majoring in history, literature, philosophy, religion, psychology, or sociology, or in any other interested departments. In 1951-52 the courses planned are 201-202, 215 and 216.

201-202. THE PHILOSOPHY OF ART.—Analysis with the aid of examples of general terms used in the discussion of art. Reference to recent aesthetic theories.  
6 s.h. (E) PROFESSOR GILBERT

213-214. HISTORY OF AESTHETICS.—Theories of art and beauty from Pythagoras to Croce. 6 s.h. (E) PROFESSOR GILBERT

215. RELIGIOUS ART OF THE ANCIENT NEAR EAST.—The development of art, particularly architecture and sculpture, as the material expression of religious ideas in Egypt, Mesopotamia and in part Syria and Palestine to the Persian conquest. 3 s.h. (w) ASSISTANT PROFESSOR MARKMAN

216. RELIGIOUS ART OF THE CLASSICAL WORLD.—The religious art, particularly architecture and sculpture, of Greece and Rome with special emphasis on the monuments in the Near East. 3 s.h. (w) ASSISTANT PROFESSOR MARKMAN

217. AEGEAN ART.—A study of the problems of Aegean art as the forerunner of Greek art and in relation to the contemporary civilizations of the eastern Mediterranean world. Open to graduate students, seniors and, after consultation with the instructor, to juniors. 3 s.h. (w) ASSISTANT PROFESSOR MARKMAN

218. EARLY GREEK ART.—A study of the problems of the origin and development of Greek art in the geometric period to the end of the archaic. Open to graduate students, seniors and, after consultation with the instructor, to juniors. 3 s.h. (w) ASSISTANT PROFESSOR MARKMAN

## DIVISION OF ANCIENT LANGUAGES AND LITERATURES

PROFESSORS CLARK, ROGERS, AND STINESPRING; ASSISTANT PROFESSORS BROWNLEE, ROSE,  
TRUESDALE, AND WAY

Graduate work in the Department of Greek is offered leading to the A.M. and Ph.D. degrees. In order to undertake graduate study in Greek a student should have had four years' (24 semester hours) study of the Greek language. A student of demonstrated ability in Greek may, on occasion, be admitted with fewer course credits.

Three types of courses are offered for graduate study: (1) Courses devoted to extensive reading in the six divisions of classical Greek literature; (2) courses on Greek archaeology, dialects, and inscriptions; (3) advanced seminars on specific

authors or groups of authors. The courses offered rotate from year to year, usually in a fixed sequence. For 1951-52 the courses planned are 247-248, 257, 303-304.

## FOR SENIORS AND GRADUATES

201-202. GREEK TRAGEDY.—6 s.h. ASSISTANT PROFESSOR TRUESDALE

203-204. HOMER.—*Odyssey*. PINDAR AND BACCHYLIDES. 6 s.h.  
ASSISTANT PROFESSOR TRUESDALE

205-206. GREEK HISTORIANS.—6 s.h. ASSISTANT PROFESSOR ROSE

207-208. GREEK ORATORS.—6 s.h. ASSISTANT PROFESSOR WAY

209-210. PLATO.—*Symposium*, *Protagoras*, and parts of the *Republic*. 6 s.h.  
ASSISTANT PROFESSOR WAY

211-212. ARISTOPHANES.—6 s.h. ASSISTANT PROFESSOR TRUESDALE

243. ATHENIAN TOPOGRAPHY.—The topography and monuments of ancient Athens. 3 s.h. ASSISTANT PROFESSOR WAY

244. GREEK EPIGRAPHY.—Lectures on the history of the alphabet and the development of the local Greek alphabets, followed by extensive reading of inscriptional texts in facsimile. 3 s.h. ASSISTANT PROFESSOR WAY

245. GREEK DIALECTS.—A linguistic study of transliterated inscriptions illustrative of the major Greek dialects. The interrelations of the dialectal forms are examined, with reference, where possible, to their origin in protoethnic Greek. 3 s.h. ASSISTANT PROFESSOR WAY

246. GREEK HISTORICAL INSCRIPTIONS.—The more valuable historical inscriptions are read in chronological order and interpreted in their general bearing upon the course of Greek history. 3 s.h. ASSISTANT PROFESSOR WAY

247-248. GREEK ARCHAEOLOGY.—Advanced course in the general field for seniors and graduates, comprising architecture, sculpture, vases, and the minor arts. 6 s.h. ASSISTANT PROFESSOR WAY

(Of the courses numbered from 243 to 248, only two semester-courses are offered each year.)

257. SOCIAL AND CULTURAL HISTORY OF THE HELLENISTIC WORLD FROM ALEXANDER TO AUGUSTUS.—Lectures, readings, and discussions. This course will not be separately credited without the sequel, Latin 258. 3 s.h.

PROFESSOR ROGERS

## FOR GRADUATES

The more advanced work of the graduate department is done in the seminar. One author or group of authors forms the center of study each year. Seminars are offered in ARISTOPHANES (301-302), THE GREEK HISTORIANS (303-304), THE ATTIC ORATORS (305-306), and THE GREEK TRAGIC POETS (307-308). These run through a cycle of four years.

Graduate students of Duke University may attend the American School of Classical Studies in Athens, Greece, without charge for tuition, and they are eligible to compete for the fellowships that are offered annually by the School. These consist of two fellowships in Greek archaeology, and one in the language, literature, and history of ancient Greece, each with a stipend of \$2,000. They are awarded mainly on the basis of examinations held in the beginning of February of each year.

## LATIN AND ROMAN STUDIES

Graduate work in the Department of Latin is offered leading to the A.M. and the Ph.D. degrees. The student who wishes to study for the A.M. should present, as a prerequisite, at least 18 semester hours of credit in Latin beyond the four-year high school courses or its college equivalent. He should also have an elementary knowledge of French and German.



The student who wishes to proceed to a Ph.D. degree should have—in addition to the requirements above—at least 12 semester hours credit in Greek in undergraduate courses. He must have a reading knowledge of French and German, and a reading knowledge of Italian is desirable. The Department may reject a student who literally meets these requirements, but whose undergraduate record does not show positive promise of success in advanced study. The courses planned for 1951-52 are 211-212, 258, 343-344.

#### FOR SENIORS AND GRADUATES

##### 201. ROMAN FICTION.

##### 202. LATIN CHRISTIAN WRITERS.

203-204. ROMAN EPIC: ENNIUS, VERGIL, MANILIUS, LUCAN, FLACCUS, STATIUS, SILIUS.—A study of this literary genre, and its development by Roman writers; extensive reading of the Roman epics. *Not offered if 205-206 is given.* 6 s.h. (E)

205-206. ROMAN DRAMA: PLAUTUS, TERENCE, SENECA.—A rapid reading course in which five plays of Plautus, three of Terence, and two of Seneca are studied. 6 s.h. (E)

##### 207-208. ROMAN PHILOSOPHY.

##### 209-210. VULGAR LATIN: INTRODUCTION TO ROMANCE PHILOLOGY.

211-212. ROMAN ORATORY.—A survey of the history of Roman oratory, centering about the *Brutus* of Cicero and Tacitus' *Dialogus*. 6 s.h. PROFESSOR ROGERS

##### 215. INTRODUCTION TO ROMAN ART AND ARCHEOLOGY.

##### 216. TOPOGRAPHY AND MONUMENTS OF ANCIENT ROME.

##### 251-252. ROMAN LIFE.

258. SOCIAL AND CULTURAL HISTORY OF THE GRAECO-ROMAN WORLD.—The Roman Empire as the trustee of Hellenism and Christianity, and its own original contributions to modern civilization; lectures, readings, and discussions. This course continues Greek 257 and will not be separately credited. 3 s.h. PROFESSOR ROGERS

##### 281-282. ROMAN HISTORICAL LITERATURE.

283-284. ROMAN LAW.—Readings in the original sources with parallel study of modern exposition of the Roman legal system. 6 s.h. PROFESSOR ROGERS

#### FOR GRADUATES

309-310. SIGHT READING AND COMPOSITION.—Comprehensive reading in special fields of Roman Literature not included in other courses, with which the writing of Latin will be correlated. 6 s.h. ASSISTANT PROFESSOR ROSE

311-312. LATIN EPIGRAPHY.—Introduction to Latin epigraphy, with considerable practice in reading short inscriptions, *first semester*; and this is followed by a study of important historical inscriptions including the Monumentum Ancyranum; *second semester*. 6 s.h. PROFESSOR ROGERS

SEMINARS: Various authors or historical periods are selected from year to year as a basis for training in criticism and research. Seminars are offered in the following: CATULLUS (301-302), ROMAN HISTORIANS (331-332), ROMAN PROVINCIAL ADMINISTRATION (341-342), THE REIGN OF TIBERIUS (343-344), MARTIAL (351-352), HORACE (361-362), LUCRETIVUS (371-372), and CICERO'S PUBLIC CAREER (391-392).

#### LINGUISTICS

#### FOR GRADUATES

375-376. GREEK AND LATIN LINGUISTICS.—A comparative study of the development of forms and inflections in Greek and Latin. 6 s.h.

ASSISTANT PROFESSOR ROSE

385-386. **ELEMENTARY SANSKRIT.**—An introductory course to the classical language and literature. The linguistic importance of Sanskrit will be stressed, especially with reference to Greek, Latin, and Germanic. 6 s.h.

ASSISTANT PROFESSOR ROSE

### SEMITICS

The courses planned for 1951-52 are 201-202, 207-208, 305, 309.

#### FOR SENIORS AND GRADUATES

201-202. **FIRST HEBREW.**—The principles and structure of the Hebrew language, with translations of selected Old Testament narratives. 6 s.h.

PROFESSOR STINESPRING

205-206. **ELEMENTARY ARABIC.**—Introduction to the classical language and literature, with some attention to the modern colloquial idiom. 6 s.h.

PROFESSOR STINESPRING

207-208. **SECOND HEBREW.**—Samuel or Kings the first semester; Isaiah the second. 6 s.h.

ASSISTANT PROFESSOR BROWNLEE

#### FOR GRADUATES

304. **ARAMAIC.**—A study of the Aramaic portions of the Old Testament and selected passages from the Targums, Midrashes, and Talmuds. 3 s.h.

PROFESSOR STINESPRING

305. **THIRD HEBREW.**—A study of late Hebrew prose, with readings from Chronicles, Ecclesiastes, and the Mishnah. Hours to be arranged. 3 s.h.

PROFESSOR STINESPRING

307. **SYRIAC.**—A study of the script and grammar, with readings from the Syriac New Testament and other early Christian documents. Some knowledge of Hebrew and Aramaic prerequisite. 3 s.h.

PROFESSOR STINESPRING

309. **HISTORY OF THE ANCIENT NEAR EAST.**—A survey of the early civilizations of Egypt, Palestine, Syria, and Mesopotamia in the light of Biblical archeology. 3 s.h.

PROFESSOR STINESPRING

#### RELATED COURSES IN OTHER DEPARTMENTS

Philosophy 217, Religion 217, 218, 220, 313, 316, 318.

Under the terms of a co-operative agreement graduate students of Duke University may, with the approval of the chairman of their major department, take any graduate course offered by the Departments of Greek and Latin of the University of North Carolina by the payment of a nominal fee. A list of these courses will be sent upon request.

### BOTANY

PROFESSOR BLOMQUIST, CHAIRMAN—203 BIOLOGY BUILDING; PROFESSOR KRAMER, DIRECTOR OF GRADUATE STUDIES—04 BIOLOGY BUILDING; PROFESSORS ADDOMS, HARRAR, OOSTING AND WOLF; ASSOCIATE PROFESSORS ANDERSON AND PERRY; AND DR. WARREN

Graduate work in the Department of Botany is offered leading to the A.M. and Ph.D. degrees. Before undertaking graduate study in Botany a student should have had in his undergraduate program at least 12 semester hours of Botany beyond an elementary course, and related work in biological sciences. Some work in Chemistry and Physics will be desirable; and for some phases of botanical study, a necessity. The student's graduate program is planned to provide a broad basic training in the various fields of Botany, plus intensive specialization in the field of the research problem.

The courses planned for 1951-52 are 203, 204, 221, 222, 224, 225-226, 253, 255, 305, 311, 341, 359-360, 397-398.

## FOR SENIORS AND GRADUATES

202.—GENETICS.—The principles of heredity, their cytological basis, and their bearing on other fields of biology. Laboratory work involves experimental breeding of the fruit fly and interpretation of data from the breeding of plants. Offered in alternate years. Prerequisites: one year of botany, zoology, or equivalent, and college algebra. 4 s.h. ASSOCIATE PROFESSOR PERRY

203. PLANT CYTOLOGY.—A study of the structure and organization of plant cells in relation to growth, reproduction, and especially heredity. Offered in alternate years. Prerequisite: one year of botany. 4 s.h. ASSOCIATE PROFESSOR ANDERSON

204. ADVANCED PLANT ANATOMY.—The structure of vegetative and reproductive organs of seed plants. Physiological and ecological implications of structure are stressed. Offered in alternate years. Prerequisite: Botany 55 or equivalent. 4 s.h. PROFESSOR ADDOMS

216. BOTANICAL MICROTECHNIQUE.—Studies in methods of preparing temporary and permanent microscopical slides; theory of staining; the use of the microscope, especially microscopical measurements, drawing, and photomicrography; botanical photography, and lantern slides. Prerequisite: two semesters of botany. 4 s.h. ASSOCIATE PROFESSOR ANDERSON

221. STRUCTURE AND CLASSIFICATION OF FUNGI.—Prerequisite: two semesters of botany. 4 s.h. PROFESSOR WOLF

222. PHYSIOLOGY AND ECOLOGY OF FUNGI.—Prerequisite: Botany 221 or equivalent. 4 s.h. PROFESSOR WOLF

225-226. SPECIAL PROBLEMS.—Students with adequate training may do special work in the following fields. Credits to be arranged.

(a) BACTERIOLOGY, MYCOLOGY, AND PLANT PATHOLOGY.

PROFESSOR WOLF AND DR. WARREN

(b) CYTOLOGY.

ASSOCIATE PROFESSOR ANDERSON

(c) ECOLOGY.

PROFESSOR OOSTING

(d) GENETICS.

ASSOCIATE PROFESSOR PERRY

(e) MORPHOLOGY AND ANATOMY OF HIGHER PLANTS.

PROFESSORS ADDOMS, HARRAR AND OOSTING

(f) MORPHOLOGY AND TAXONOMY OF LOWER GROUPS.

PROFESSOR BLUMQUIST AND ASSOCIATE PROFESSOR ANDERSON

(g) PHYSIOLOGY.

PROFESSORS ADDOMS AND KRAMER

(h) PLANT MICROCHEMISTRY.

PROFESSOR ADDOMS

(i) TAXONOMY OF HIGHER GROUPS.

PROFESSOR BLUMQUIST

252. ADVANCED PLANT PHYSIOLOGY.—The physicochemical processes and conditions underlying the physiological processes of plants. Prerequisite: Botany 151 or equivalent; organic chemistry recommended. 4 s.h. PROFESSOR KRAMER

255. ADVANCED TAXONOMY.—A study of the historical background of plant taxonomy, modern concepts and systems of classification, nomenclatorial problems, and the taxonomy of specialized groups. Prerequisite: two years of botany, including Botany 52 or equivalent. 4 s.h. PROFESSOR BLUMQUIST

256. FIELD ECOLOGY.—An ecological survey of local vegetation, including theory and practice in the use of instruments for precise habitat studies, and analysis of community and successional relationships. 4 s.h. PROFESSOR OOSTING

## FOR GRADUATES

305. PLANT GEOGRAPHY.—The distribution and limits of vegetation types with special consideration of the plant communities of North America. Offered in alternate years. Prerequisite: Botany 156 or equivalent. 4 s.h. PROFESSOR OOSTING

310. STRUCTURE AND CLASSIFICATION OF BRYOPHYTES AND PTERIDOPHYTES.—The morphological and systematic characteristics of mosses, liverworts, ferns, and fern allies. 4 s.h. PROFESSOR BLOMQUIST

311. STRUCTURE AND CLASSIFICATION OF ALGAE.—The morphological and ecological characteristics of the common freshwater and marine species and the principles underlying their classification. Collecting, identification, and the making of permanent microscopical preparations. 4 s.h. PROFESSOR BLOMQUIST

341. METHODS IN PLANT PHYSIOLOGY.—The theory and use of apparatus and methods in the physiological research. 4 s.h. PROFESSOR KRAMER

342. PLANT MICROCHEMISTRY.—The identification and estimation of the constituents of plant cells by the use of microchemical tests. Offered in alternate years. 2 s.h. PROFESSOR ADDOMS

359-360. RESEARCH IN BOTANY.—Individual investigation in the various fields of botany. Credits to be arranged.

PROFESSORS ADDOMS, BLOMQUIST, HARRAR, KRAMER, OOSTING, WOLF; ASSOCIATE PROFESSORS ANDERSON AND PERRY

397-398. GENERAL BOTANICAL SEMINAR.—One hour per week throughout the year. Required of all graduates majoring in botany. 2 s.h.

PROFESSORS ADDOMS, BLOMQUIST, HARRAR, KRAMER, OOSTING, WOLF; ASSOCIATE PROFESSORS ANDERSON AND PERRY; AND DR. WARREN

### FOREST BOTANY

FOR SENIORS AND GRADUATES

224. FOREST PATHOLOGY.—Special reference to diseases of forest trees. Prerequisites: Botany 1 and 2. 4 s.h. PROFESSOR WOLF

253. DENDROLOGY.—Nomenclature, classification, and identification of woody plants with special reference to species indigenous to southeastern United States and other important forest regions of temperate North America. Laboratory and field work. Prerequisite: one year of botany. 3 s.h. PROFESSOR HARRAR

### RELATED COURSES IN OTHER DEPARTMENTS

These related courses may be counted toward a major in botany. Forestry 257; Zoology 341.

## CHEMISTRY

PROFESSOR SAYLOR, EXECUTIVE OFFICER—115A CHEMISTRY BUILDING; PROFESSOR VOSBURGH, DIRECTOR OF GRADUATE STUDIES—211 CHEMISTRY BUILDING; PROFESSORS BIGELOW, GROSS, HAUSER, HOBBS, AND LONDON; ASSOCIATE PROFESSORS BRADSHAW, BROWN, AND HILL

In the Department of Chemistry graduate work is offered leading to the A.M. and Ph.D. degrees. Before undertaking a graduate program in Chemistry, a student should have taken an undergraduate major in Chemistry along with related work in mathematics and physics.

Graduate courses in the department are designed to provide a broad basic training in the fields of inorganic, organic, analytical, and physical chemistry. An important requirement for the Ph.D. degree is the successful completion, under the direction of a member of the Staff, of a research program leading to the solution of an original problem. The choice of the research problem, for either the A.M. or the Ph.D. degrees, will determine the field of advanced specialization.

For 1951-52 the courses planned are 206, 215-216, 233, 234, 236, 251, 252, 253-254, 261-262, 267-268, 271, 273-274, 275-276, 303, 304, 351-352, and 363.

### FOR SENIORS AND GRADUATES

206. ELEMENTS OF THEORETICAL CHEMISTRY.—A course in general theoretical chemistry for students who do not present credit in calculus. Credit is not given for both 206 and 261-262. Three recitations and three laboratory



hours. Prerequisites Chemistry 70, 151-152, Physics 51-52 or 1-2 and Mathematics 6 s.h. With the permission of the Director of Graduate Studies, graduate students from other departments may offer other advanced science courses in place of some of these prerequisites. 4 s.h. PROFESSORS SAYLOR AND HOBBS

215-216. ADVANCED INORGANIC CHEMISTRY.—A study of modern theories of valence and molecular structure; also of inorganic compounds, particularly the less common types, illustrated by suitable laboratory preparations. Prerequisites: Chemistry 70, 151-152, and 261-262, or 206. 6 s.h.

PROFESSOR VOSBURGH AND ASSOCIATE PROFESSOR HILL

233. INSTRUMENTAL ANALYSIS.—Experiments in the use of physical measuring instruments in chemical analysis with special attention to optical instruments. One lecture and three laboratory hours. Prerequisites: Chemistry 70 and one year of physics. 2 s.h. PROFESSORS HOBBS, SAYLOR, AND VOSBURGH

234. PHYSICO-CHEMICAL METHODS OF ANALYSIS.—Discussion of physico-chemical principles as applied to methods of instrumental analysis, illustrated by laboratory experiments, with emphasis on methods involving electrical techniques. One lecture and three laboratory hours. Prerequisites: Chemistry 70 and either 261-262 or 206; either of the latter may be taken concurrently. 2 s.h.

PROFESSORS HOBBS, SAYLOR, AND VOSBURGH

236. THEORY OF ANALYTICAL CHEMISTRY.—A study of such topics as precision and errors, theories of precipitation and titration, oxidation and reduction, and others, illustrated by typical analytical methods. One lecture. Prerequisites: Chemistry 70 and 261-262. 1 s.h. PROFESSOR VOSBURGH

251. QUALITATIVE ORGANIC ANALYSIS.—Systematic identification of organic compounds, including a study of solubilities and classification reactions. One lecture and three or six laboratory hours. Prerequisites: Chemistry 70 and 151-152. 2 or 3 s.h. PROFESSOR HAUSER

252. ADVANCED ORGANIC PREPARATIONS.—A laboratory course including experiments of a more difficult type than those required on the elementary level, accompanied by oral discussions of the techniques and theories involved, and designed to round out the student's knowledge of fundamental organic processes. Three or six laboratory hours. Prerequisite: Chemistry 151-152. 1 or 2 s.h.

ASSOCIATE PROFESSOR BROWN AND PROFESSOR BIGELOW

253-254. ADVANCED ORGANIC CHEMISTRY.—Discussion of the theories of organic chemistry with special reference in the first semester to the mechanism of reactions and in the second semester to the synthesis of some of the more complex compounds such as vitamins, hormones, and alkaloids. Undergraduates are admitted to this course only by permission of the Director of Undergraduate studies. Prerequisites: Chemistry 70 and 151-152. 4 s.h. PROFESSORS BIGELOW AND HAUSER

261-262. PHYSICAL CHEMISTRY.—Fundamentals of general theoretical chemistry illustrated by selected laboratory experiments. Two recitations and three laboratory hours. Prerequisites: Chemistry 70, 151-152, Physics 51-52 or 1-2 and Mathematics 51-52 or equivalent. 6 s.h. PROFESSORS HOBBS AND SAYLOR

265-266. CHEMICAL PHYSICS. STATISTICAL THEORY.—General introduction to statistical mechanics and applications to chemical problems; solution theory, reaction velocity, changes of state, quantum statistics and the metallic state. Lectures, conferences, and assigned problems. 6 s.h. PROFESSOR LONDON

267-268. CHEMICAL PHYSICS. QUANTUM THEORY OF ATOMIC AND MOLECULAR STRUCTURE.—Theory of atomic and molecular forces and the structure of matter. Lectures, conferences, and assigned problems. 6 s.h.

PROFESSOR LONDON

271. INTRODUCTION TO RESEARCH.—Lectures on the use of chemical literature, research methods, recording and publication of results, and other topics. One lecture. 1 s.h. ASSOCIATE PROFESSOR BROWN



273-274. SEMINAR.—Required of all graduate students in chemistry. One hour a week discussion. 2 s.h.

PROFESSORS BIGELOW, GROSS, HAUSER, HOBBS, SAYLOR, AND VOSBURGH;  
ASSOCIATE PROFESSORS BRADSHER, BROWN, AND HILL

275-276. RESEARCH.—The aim of this course is to give instruction in methods used in the investigation of original problems. Nine hours a week and conferences. 3 or 6 s.h.

PROFESSORS BIGELOW, GROSS, HAUSER, HOBBS, LONDON, SAYLOR, AND  
VOSBURGH; ASSOCIATE PROFESSORS BRADSHER, BROWN, AND HILL

#### FOR GRADUATES

303. THERMODYNAMICS.—Fundamental laws of thermodynamics and their applications to chemistry and physics. 3 s.h. PROFESSORS SAYLOR AND VOSBURGH

304. PHYSICAL CHEMISTRY OF REACTIONS.—The theoretical aspects of reaction kinetics, chemical equilibrium, atomic and molecular forces, and the relation of these to chemical reactions are considered. Prerequisite: Chemistry 261-262. 3 s.h. PROFESSOR HOBBS

350. ORGANIC REACTIONS.—A study of the scope and limitations of the more important types of reactions of organic chemistry from the point of view of their practical use in the synthesis of organic compounds. Lectures and discussion. Prerequisites: Chemistry 251 and 253. 2 s.h. ASSOCIATE PROFESSOR BRADSHER

351-352. ADVANCED SYNTHETIC ORGANIC CHEMISTRY.—Recent advances in certain selected fields, such as the mechanism of organic reactions, medicinals, dyes, perfumes, terpenes, and alkaloids, will be discussed. The emphasis will be placed on structure studies and synthetic methods. Lecture or seminar one hour each week. 2 s.h. PROFESSORS BIGELOW AND HAUSER

363-364. ADVANCED PHYSICAL CHEMISTRY.—Recent advances in physical chemistry are considered. Prerequisites: Chemistry 261-262 and 303, or equivalent. 4 s.h.

PROFESSORS HOBBS, SAYLOR, AND VOSBURGH;  
ASSOCIATE PROFESSOR HILL

#### RELATED COURSES IN OTHER DEPARTMENTS

##### Biochemistry and Nutrition

M241, M242, M341, M343-344, M349-350, M351-352; and Microbiology M322.

## ECONOMICS

PROFESSOR HOOVER, CHAIRMAN—320 LIBRARY; PROFESSOR SPENGLER, DIRECTOR OF  
GRADUATE STUDIES—322 LIBRARY; PROFESSORS BLACK, DE VYVER, HUMPHREY,  
RATCHFORD, SIMMONS, SMITH, AND VON BECKERATH; ASSOCIATE  
PROFESSORS HANNA AND LONDON

Graduate work in the Department of Economics is offered leading to the A.M. and Ph.D. degrees. In order to undertake graduate work in Economics, a student should have earned in his undergraduate courses a grade of "B" or better on at least 12 semester hours of Economics, distributed as follows: Principles of Economics, 6 semester hours; Intermediate Economic Theory, 3 semester hours; Elementary Statistics, 3 semester hours.

It is recommended that the student, in his undergraduate program, should have completed the following: basic "principles" courses in psychology, philosophy, logic, and each of the social sciences; mathematics through calculus; courses in general accounting and in cost accounting; enough courses in natural sciences to acquaint the student with the methodology of research in the natural sciences; courses in two widely-used foreign languages; and enough work in English composition to assure him a proper command of oral and written English.

Deficiencies in undergraduate preparation may be removed during the first year of residence. Information should be obtained from the Director of Graduate Studies on this matter and on the departmental requirements for advanced degrees.

For 1951-52 the following courses are planned: 204, 215, 216, 217, 218, 231, 233,

234, 236, 237-238, 241-242, 245, 256, 260, 265, 268, 275-276, 304, 311-312, 313-314, Public Control of Business Seminar, and several of the seminars numbered 319 through 389.

#### FOR SENIORS AND GRADUATES

204. **ADVANCED MONEY AND BANKING.**—Structure and functioning of the monetary and banking mechanism. Presupposes a thorough grounding in the field. Particular attention is given to significant areas involving issues of economic policy. Primary emphasis is placed upon the underlying basis of monetary management and upon its implementation by the central banking authorities. 3 s.h.

PROFESSOR SIMMONS

215. **ECONOMIC SYSTEMS.**—A study of alternative economic systems. In addition to an analysis of communism, anarchism, and the variants of socialism, the course will include a consideration of other proposed modifications of the existing economic order. Particular attention is given to an analysis of the Soviet economic system. Credit for this course will be given only if the student takes Economics 216. 3 s.h.

PROFESSOR HOOVER

216. **ECONOMIC FUNCTIONS OF THE STATE.**—A consideration of the primary and secondary economic functions of government and of the legislation which provides for the performance of these functions. Prerequisite: Economics 215 or its equivalent. 3 s.h.

PROFESSOR HOOVER

217. **POPULATION PROBLEMS AND RESOURCES.**—Survey of population theory and policy. Study of national and international trends in population-growth and resource-use, together with analyses of their economic and social implications. 3 s.h.

PROFESSOR SPENGLER

218. **BUSINESS CYCLES.**—Description and analysis of the causes and consequences of economic rhythms and movements of various lengths (e.g., seasonal, cyclical, long-period, etc.). Analysis of methods proposed as means of curtailing such movements, or of mitigating their effects. 3 s.h.

PROFESSOR HUMPHREY

231. **THE ECONOMIC HISTORY OF EUROPE.**—The economic development of Europe from medieval times to the present, treating such topics as guilds, mercantilism, money, banking, crises, the Industrial Revolution, the interrelationships of government and business, and the economic consequences of war. 3 s.h.

PROFESSOR SMITH

233. **STATE AND LOCAL FINANCE.**—A study of expenditures, taxation, and financial administration in state and local governments with emphasis on current problems. Special attention will be given to research methods and materials and to the financial relations between state and local governments. 3 s.h.

PROFESSOR RATCHFORD

234. **FEDERAL FINANCE.**—A study of the expenditures, revenue, and financial administration of the government of the United States, with emphasis on current problems. Special attention given to budgetary procedure, corporate and individual income taxes, and the financial relations between federal and state governments. 3 s.h.

PROFESSOR RATCHFORD

236. **TAXATION AND GOVERNMENT FINANCE.**—A basic course in public finance for advanced students. Primary emphasis is placed on taxation and tax policy, with consideration also of government expenditures, financial administration, intergovernmental fiscal relations, and public debts. Readings in texts, monographs, and source materials will be supplemented by lectures, class discussions, and reports on special topics. Not open to students who have received credit for Economics 187 or equivalent. 3 s.h.

PROFESSOR RATCHFORD

237-238. **STATISTICAL METHODS.**—A study of statistical methods appropriate for dealing with problems in business and the social sciences. In addition to developing more thoroughly the subjects considered in *Business Statistics*, the following methods will be considered: multiple, partial, and curvilinear correlation; curve fitting; probability; sampling distributions; and statistical inference. Prerequisite: Economics 138 or consent of the instructor. Either semester may be taken for credit. 6 s.h.

ASSOCIATE PROFESSOR HANNA

241-252. **VALUE AND DISTRIBUTION.**—This course is a critical survey of the leading contemporary explanations of price formation and of the determination of interest, rent, wages, and profits. 6 s.h. PROFESSOR SPENGLER

245. **PROBLEMS OF MODERN INDUSTRIALISM.**—Description and analysis of the growth of modern industrialism, of the structure and operation of large scale industry, of the inter-relations of industrial, political, and legal development, and of the implications for industry of the modern welfare state. 3 s.h. PROFESSOR VON BECKERATH

256. **LABOR LEGISLATION.**—A study of the relations of the state to labor problems with special reference to remedial legislation, to interference in labor disputes, and to social insurance. 3 s.h. PROFESSOR DE VYVER

260. **SOCIAL INSURANCE.**—A consideration of the economic and social problems involved in workmen's compensation laws, unemployment insurance, old-age pensions, and health insurance for workers. Particular attention will be given to the present federal and state social security legislation. 3 s.h. PROFESSOR DE VYVER

265. **INTERNATIONAL TRADE AND FINANCE.**—A study of the fundamental principles of international trade and foreign exchange. Subjects covered will include international specialization, balance of payments, foreign investments, tariffs and commercial policies, exchange control, exchange rates, and international monetary problems. 3 s.h.

268. **COMPETITIVE VERSUS MONOPOLISTIC ENTERPRISE.**—A study of monopoly and imperfect competition as disturbances of a free, self-regulating market economy in an individualistic democratic political system; of the possibilities of public and private action respecting the preservation of these systems; and of the implications of planning and public welfare policies. 3 s.h. PROFESSOR VON BECKERATH

275-276. **ADVANCED INDUSTRIAL ACCOUNTING AND MANAGEMENT.**—This course traces the ways and means of executive control through statistics and industrial accountancy. Emphasis is put upon the economics of overhead costs. A complete practice set of cost accounting is worked by each student during the course. Courses 57-58 and 105 are ordinarily prerequisites for this course. 5 s.h. PROFESSOR BLACK

#### FOR GRADUATES

304. **SEMINAR IN MONEY AND BANKING.**—3 s.h. PROFESSOR SIMMONS

311-312. **HISTORY OF POLITICAL ECONOMY.**—This course traces the development of economic theory, giving special attention to the various schools of economic thought in England, France, Germany, Italy, and the United States. A large amount of collateral reading in the works of typical authors is required. Lectures and class discussions. 6 s.h. PROFESSOR SPENGLER

313-314. **SEMINAR IN ECONOMIC THEORY.**—The course consists of directed research in economic theory. The primary purpose is the correction of authoritative eclecticism and its replacement by individually integrated theory. Prerequisite: Economics 241-242 or its equivalent. 6 s.h. PROFESSOR HOOVER

317. **SEMINAR IN POPULATION PROBLEMS.**—3 s.h. PROFESSOR SPENGLER

318. **GENERAL SEMINAR IN ECONOMICS.**—All graduate students with economics as a major subject are members of this seminar. Reports of progress in research will be made, and there will be lectures and critical discussion by members of the Department. Year course. No credit. STAFF

319. **SEMINAR IN THE THEORIES AND PROBLEMS OF ECONOMIC CHANGE.**—3 s.h. PROFESSOR SPENGLER

320. **SEMINAR IN BUSINESS CYCLES.**—3 s.h. PROFESSOR HUMPHREY

330. **SEMINAR IN PUBLIC FINANCE.**—3 s.h. PROFESSOR RATCHFORD

331. RESEARCH IN ECONOMIC HISTORY: A SEMINAR.—3 s.h.  
 PROFESSOR SMITH
343. SEMINAR IN FINANCIAL ORGANIZATION.—3 s.h.  
 PROFESSOR RATCHFORD
355. SEMINAR IN LABOR PROBLEMS.—3 s.h.  
 PROFESSOR DE VYVER
365. SEMINAR IN INTERNATIONAL TRADE.—3 s.h.  
 PROFESSOR HUMPHREY
368. SEMINAR IN MARKETING PROBLEMS.—3 s.h.  
 ASSOCIATE PROFESSOR LANDON
386. SEMINAR IN LATIN-AMERICAN ECONOMIC PROBLEMS.—3 s.h.  
 PROFESSOR SMITH
389. SEMINAR IN BUSINESS AND GOVERNMENT.—3 s.h.  
 PROFESSOR HUMPHREY

## RELATED COURSES IN OTHER DEPARTMENTS

The following course, included in the curriculum of the School of Law, carries economics credit for economics majors:

**PUBLIC CONTROL OF BUSINESS SEMINAR.**—Intensive study of the federal anti-trust laws and their common-law background, with emphasis on the economic policies involved. 3 s.h.  
 PROFESSORS LIVENGOOD AND SPENGLER

Attention is called to the following courses in related departments:  
 Forestry 277; History 219-220; Political Science 207.

## EDUCATION

PROFESSOR CARR, ACTING CHAIRMAN AND ACTING DIRECTOR OF GRADUATE STUDIES—1B  
 WEST DUKE BUILDING; PROFESSORS CHILDS, NAHM, AND PROCTOR; ASSOCIATE  
 PROFESSORS BOLMEIER, EASLEY, RUDISILL, STUMPF, AND WEITZ

Graduate work in Education is offered leading to the A.M., the M.Ed., the Ph.D., and the Ed.D. degrees. For each of these degrees there are specific requirements and prerequisites, all of which may be found stated in detail in this *Bulletin*, pp. 28-36.

In general, candidates for the A.M. must choose their course work in accordance with a unified plan: the mere accumulation of course credits in more or less unrelated work will not lead to an A.M. degree. As a prerequisite for study toward the A.M., the student must present 18 semester hours of undergraduate credit in Education, plus 12 semester hours in an acceptable minor.

Departmental requirements and prerequisites for all of these degrees may be obtained from the Director of Graduate Studies. The courses planned for 1951-52 are 235, 208A, 210, 217, 237, 203, 204, 205, 209, 216, 234, 255, 330-331.

## ELEMENTARY EDUCATION

## FOR SENIORS AND GRADUATES

207. **TECHNIQUE OF TEACHING.**—An advanced course in the teaching process, dealing with the theory underlying sound technique and applied specifically to the work of the elementary school. 3 s.h. (E)  
 PROFESSOR CARR

212. **PSYCHOLOGY OF THE ELEMENTARY SCHOOL SUBJECTS.**—A study of the psychology of learning as applied to teaching the common school subjects. 3 s.h. (E)  
 PROFESSOR CARR

222. **THE CURRICULUM AND MATERIALS OF THE ELEMENTARY GRADES.**—A study of curriculum problems in the elementary schools. 3 s.h. (E)  
 PROFESSOR CARR

232. **SUPERVISION OF INSTRUCTION.**—A survey of supervision as a means of improving instruction and adapting the curriculum to the learner and to community needs. 3 s.h. (E)  
 PROFESSOR CARR



235. THE NATURE, FUNCTION, AND REORGANIZATION OF THE CURRICULUM.—One of the required courses for the Master of Education degree without thesis. Selected problems guiding the reading of students. Open to graduate students only. 3 s.h. PROFESSOR CARR

### EXPERIMENTAL EDUCATION AND EDUCATIONAL PSYCHOLOGY

#### FOR SENIORS AND GRADUATES

208A. MENTAL TESTS AND APPLICATIONS.—A study of the development of intelligence testing, the concept of general intelligence, various recent applications of mental tests, and training in the giving of individual tests. Prerequisite: course 258 or six semester hours of other work in educational psychology or psychology. First semester. 3 s.h. (E) ASSOCIATE PROFESSOR EASLEY

208B. PRACTICUM.—Open only to students approved by the instructor. Second semester. 2 s.h. (E) ASSOCIATE PROFESSOR EASLEY

209. STATISTICAL METHODS APPLIED TO EDUCATION.—A study of statistical methods of treating educational and social data designed to enable teachers or administrators to interpret and use the results of scientific investigations in education. 3 s.h. (E) ASSOCIATE PROFESSOR STUMPF

210. INTRODUCTION TO EDUCATIONAL RESEARCH.—The general purpose of this course is to give the student an overview of research, acquaint him with the nature of research processes, and develop within him an appreciation of the essential characteristics of good research work. The course is one of the four basic courses required for the Master of Education degree without thesis and is designed to be liberalizing as well as technical. Open to graduate students only. 3 s.h. (E) ASSOCIATE PROFESSOR STUMPF

216. PSYCHOLOGICAL PRINCIPLES OF SECONDARY EDUCATION.—A study of adolescence and the psychology of learning as applied to teaching the principal high-school subjects. 3 s.h. (E) PROFESSOR CHILDS

217. THE PSYCHOLOGICAL PRINCIPLES OF EDUCATION.—An advanced study of teaching, learning, and the learner. This is one of the courses required for the Master of Education degree without thesis. Selected problems guiding the reading of students will be discussed in class. Open to graduate students only. 3 s.h. ASSOCIATE PROFESSOR EASLEY

227. THE PSYCHOLOGY OF LEARNING: PROBLEMS.—The major problems related to the learning process will be examined, with the experimental literature bearing on them. The curves of learning and forgetting, the distribution of practice, economical methods of learning, and the transfer of training will be the major topics considered. 3 s.h. (E) ASSOCIATE PROFESSOR EASLEY

228. THE PSYCHOLOGY OF LEARNING: THEORETICAL AND EXPERIMENTAL.—In this semester the laws of learning, the most important explanatory principles, and the major systems of psychology of learning will be considered. Class experiments will run throughout the semester. Prerequisite: course 227 or its equivalent. 3 s.h. (E) ASSOCIATE PROFESSOR EASLEY

237. INVESTIGATIONS IN READING.—A summary of the results of the more important scientific studies in reading; interpretation of the results in terms of aims, methods, materials of instruction, testing, diagnosis, and supervision; emphasis on problems requiring further investigation. 3 s.h. (E) ASSOCIATE PROFESSOR RUDISILL

258. EDUCATIONAL MEASUREMENTS.—A critical study of the principles and techniques involved in measurement in education, with opportunity for individual research. Prerequisite: twelve semester hours in the Department, including a course in educational psychology. 3 s.h. (E)

#### FOR GRADUATES

307-308. SEMINAR IN EDUCATIONAL PSYCHOLOGY.—4 s.h. (E)



318. EDUCATIONAL IMPLICATIONS OF GENETIC PSYCHOLOGY.—A study of the development of the individual through the stages of growth and learning, with emphasis upon early and later childhood; the development of such behavior patterns as play, language, etc.; the process of socialization, etc. Prerequisite: six semester hours of psychology or educational psychology. 3 s.h. (E)

320. ADVANCED EDUCATIONAL STATISTICS.—This course continues the work begun in Education 209, dealing particularly with further methods of correlation and with various applications to the theory of measurement. The course does not require a background of mathematics beyond high-school algebra. 3 s.h. (E)

339. RESEARCH COURSE IN EDUCATIONAL TESTS.—A study of problems in the construction and interpretation of tests. Prerequisite: the equivalent of course 258. 3 s.h. (E)

## HISTORY AND PHILOSOPHY OF EDUCATION

### FOR SENIORS AND GRADUATES

200. INTRODUCTION TO THE PHILOSOPHY OF EDUCATION.—A consideration of fundamental concepts underlying educational theory. 3 s.h. (E)

204. THE SCHOOL AS AN INSTITUTION.—Consideration is given to the place of the school in the American social order, and its adaptation to social, economic, and political changes. Special attention is directed to the responsibility (1) of the school for seeking solutions to the perplexing problems of youth created by a changing society; and (2) of the government for providing greater equality of educational opportunities. One of the required courses for the M.Ed. degree without thesis. Open to graduate students only. 3 s.h. (E)

ASSOCIATE PROFESSOR BOLMEIER

214. HISTORY OF EDUCATION IN THE UNITED STATES.—A study of the development of the American public school and the interaction of higher education and the public school. 3 s.h. (E)

244. STUDIES IN THE HISTORICAL DEVELOPMENT OF PUBLIC SCHOOL ADMINISTRATION.—An advanced course devoted to the development of public school administration in the South, with especial reference to North Carolina as a type. 3 s.h.

254. HISTORY OF SECONDARY EDUCATION IN THE UNITED STATES.—A study of historical and comparative conceptions of the secondary school, changes in American life affecting the secondary school, present status of the secondary school, current tendencies toward expansion, and the problem of state and federal aid. 3 s.h.

PROFESSOR PROCTOR

## PUBLIC SCHOOL ADMINISTRATION

### FOR SENIORS AND GRADUATES

203. PRINCIPLES OF SCHOOL ADMINISTRATION.—The fundamental facts and procedures of school administration, an analysis of the problems and policies of the organization and direction of a local school system, and the functions of the various school officials. Prerequisite: Education 103 and 88, or six semester hours of equivalent work in education. 3 s.h. (E)

♂ PROFESSOR PROCTOR AND ASSOCIATE PROFESSOR BOLMEIER

213. PROBLEMS IN THE ORGANIZATION AND ADMINISTRATION OF THE ELEMENTARY SCHOOL.—A study of the work of the elementary school principal. 3 s.h. (E)

PROFESSOR PROCTOR

233. ADMINISTRATIVE PUPIL-ACCOUNTING.—An advanced study of gradation and classification of pupils, with incidental attention to the keeping of records and the making of reports. The study includes a consideration of individual differences, promotions, acceleration, and retardation of pupils; the various plans for classification and gradation; interpreting the results of tests, and some practice in the computation of statistical measures. 3 s.h. (E)

PROFESSOR PROCTOR

**234. SECONDARY-SCHOOL ORGANIZATION AND ADMINISTRATION.**—This course is designed especially for principals, teachers, and other prospective members of the secondary-school staff. The scope of secondary education is considered to encompass junior high school, regular high school, senior high, and junior college. Special treatment is given to the problems of internal organization and management. 3 s.h. ASSOCIATE PROFESSOR BOLMEIER

**253. LEGAL PHASES OF SCHOOL ADMINISTRATION.**—The primary purpose of this course is to familiarize prospective school administrators with the legal features of school organization and administration. Although some attention is given to constitutional and statutory provisions, the main emphasis is upon court decisions relating to education. Students are expected to select appropriate problems in school law for intensive study. 3 s.h.

## FOR GRADUATES

**323. PUBLIC SCHOOL FINANCE.**—A study of educational costs, sources of revenue for the support of public education, collection of revenue, basis of distribution, and accounting for funds spent. 3 s.h. (E) ASSOCIATE PROFESSOR STUMPF

**330-331. PUBLIC SCHOOL ADMINISTRATION, SEMINAR I.**—This seminar is to be taken in the second year of the Ed.D. program. It involves consideration of the following four units of work: (1) organizing the school system; (2) administering the educational program; (3) financing the educational program; (4) administering the school personnel. 6 s.h. each semester. (E)

PROFESSORS CARR AND PROCTOR, AND ASSOCIATE  
PROFESSORS BOLMEIER AND STUMPF

**332-333. PUBLIC SCHOOL ADMINISTRATION, SEMINAR II.**—This seminar is to be taken in the third year of the Ed.D. program. It involves the business administration of the school system; school plant planning, maintenance and operation; public relations and legal aspects of school administration; school records and reports; policy making and the evolution of current procedures. Students will spend some time in field work observing school systems in operation and studying current problems of school administration. 6 s.h. each semester. (E)

PROFESSORS CARR AND PROCTOR, AND ASSOCIATE  
PROFESSORS BOLMEIER AND STUMPF

**343. STATE AND COUNTY SCHOOL ADMINISTRATION.**—A study of state and county organization of public schools, emphasizing underlying principles. 3 s.h. PROFESSOR PROCTOR

**363. CITY SCHOOL ADMINISTRATION.**—A study of the organization and administration of city school systems, including administrative phases of supervision. 3 s.h. (E) PROFESSOR PROCTOR

## SECONDARY EDUCATION AND EDUCATIONAL SOCIOLOGY

## FOR SENIORS AND GRADUATES

**205. CURRICULUM PROBLEMS IN SECONDARY EDUCATION.**—A consideration of the aims and objectives of secondary school subjects, emphasizing practical problems of curriculum-making in the high school. 3 s.h. (E)

PROFESSOR CHILDS

**206. SOCIOLOGICAL FOUNDATIONS OF THE SECONDARY SCHOOL SUBJECTS.**—A consideration of the aims and objectives of the secondary school. Prerequisite: six semester hours in education, including course 105, or Sociology 104, or its equivalent. 3 s.h. (E)

PROFESSOR CHILDS

**215. EDUCATIONAL AND VOCATIONAL GUIDANCE.**—A survey of the literature on guidance with special reference to secondary education; a critical study of the principles and techniques used in guidance; an attempt to locate the problems most urgently in need of solution. Prerequisite: twelve semester hours in the Department, including course 105 or course 206. 3 s.h. (E)

PROFESSOR CHILDS

255. GUIDANCE FUNCTIONS OF THE CLASSROOM TEACHER.—A consideration of the guidance philosophy, methods and tools appropriate to the student personnel functions of the classroom teacher. This course is designed for students who do not plan to become guidance specialists, but who wish to apply the principles and techniques of guidance in their teaching and program of pupil development. Prerequisites: 12 s.h. of work, either in education or in a combination of education and psychology or in psychology. 3 s.h.

ASSOCIATE PROFESSOR WEITZ

#### NURSING EDUCATION

310. NURSING EDUCATION: ORGANIZATION AND ADMINISTRATION IN NURSING SCHOOLS.—The organization and administration of schools of nursing; their administrative control and support, the preparation of the budget, the faculty organization, the administration of the curriculum, the provision of instructional facilities, records and reports, and professional and public relations. Problems involved in organizing and administering a hospital nursing service are also presented and relationships between the School of Nursing and the nursing service are discussed. Year course. 4 s.h.

PROFESSOR NAHM

311. NURSING EDUCATION: PROBLEMS OF PERSONNEL ADMINISTRATION IN NURSING.—A course which deals with problems in the organization and administration of personnel services for students and for graduate nurses. It includes a discussion of methods of selection and orientation, personnel records, provision for general welfare, counseling, placement and follow-up. Year course. 4 s.h.

PROFESSOR NAHM

312. NURSING EDUCATION: RESEARCH PROBLEMS.—To acquire some knowledge of the principles and methods of research each student works on an individual problem in the field of her major interest. Year course. 4 s.h.

PROFESSOR NAHM

#### METHODOLOGY OF RESEARCH

##### FOR GRADUATES

301. METHODS OF EDUCATIONAL RESEARCH: SEMINAR.—Graduate students are instructed in methods of research as applied to selected educational problems. Each student must select for intensive study and practice a subject in which he is interested. Either semester. 3 s.h.

PROFESSORS CARR, CHILDS, AND PROCTOR; AND ASSOCIATE  
PROFESSORS BOLMEIER AND STUMPE

##### RELATED COURSES IN OTHER DEPARTMENTS

FOR MAJORS IN EDUCATIONAL PSYCHOLOGY, ELEMENTARY EDUCATION,  
AND SECONDARY EDUCATION

Philosophy 208, 242; Psychology 206, 207, 209, 212, 215, 226, 306, 309, 310;  
Sociology 249, 381, 382.

##### FOR MAJORS IN PUBLIC SCHOOL ADMINISTRATION

Economics 217, 233, 234, 236; Political Science 209, 230, 231, 241-242, 291, 292;  
Sociology 233, 235, 237, 243, 246.

##### FOR MAJORS IN HISTORY AND PHILOSOPHY OF EDUCATION

History 209-210; Philosophy 205, 208, 223; Religion 395, 396; Sociology 286, 381,  
382.

#### ENGLISH

PROFESSOR IRVING, CHAIRMAN—265 WEST DUKE BUILDING; PROFESSOR BAUM, DIRECTOR OF  
GRADUATE STUDIES—402 LIBRARY; PROFESSORS BOYCE, BRINKLEY, FOERSTER, GILBERT,  
GOHDES, HUBBELL, AND LEARY; ASSOCIATE PROFESSOR WARD

The department offers graduate work leading to the A.M. and Ph.D. degrees. Students intending to major in English should have taken enough undergraduate courses in literature to enable them to pursue graduate studies profitably. To

satisfy the requirements for the A.M. degree a student must (a) elect 203-204 (3 or 6 semester hours); one of the "period courses" (215-216, 219-220, 221-222, 223-224, 229-230, 233-234, 247-248, 251-252; an appropriate seminar; and 9 (or 6) additional semester hours; and (b) write a thesis. A statement of the requirements for the Ph.D. degree may be obtained from the Director of Graduate Studies.

In 1951-52 the courses offered are 201-202, 203-204, 215-216, 217 (second semester), 219-220, 221-222, 227, 229-230, 233-234, 235, 251-252, 269 (second semester), 349-350, (a, b, e), 359-360.

#### FOR SENIORS AND GRADUATES

201-202. **ANGLO-SAXON.**—In the first semester, an introduction to the language, with the reading of selected prose and of some of the shorter poems; in the second semester, the *Beowulf*. 6 s.h. (w) PROFESSOR BAUM

203-204. **CHAUCER.**—Reading and interpretation of the text; in the first semester, the principal *Canterbury Tales*; in the second, the *Troilus* and the minor poems. A reading report and a term paper. 6 s.h. (w) PROFESSOR BAUM

205-206. **MIDDLE ENGLISH.**—Close study of selected texts, with attention to the development of the language and to the history of the literature from 1200 to 1400. A term paper each semester. 6 s.h. (w) PROFESSOR BAUM

215-216. **ELIZABETHAN DRAMA.**—Careful study of one or two major dramatists (Jonson or Beaumont and Fletcher) and extensive reading in the other writers (Heywood, Ford, Massinger, Marlowe, Middleton) with emphasis on the nature and qualities of their work in relation to its historical background. Exposition of plays, reports, and a term paper each semester. 6 s.h. (w)

PROFESSOR GILBERT

217. **MILTON.**—Milton's poetry and prose, with emphasis on the major poems. 3 s.h. (w) PROFESSOR GILBERT

218. **SPENSER.**—The reading of Spenser's work, with chief attention to *The Faerie Queene*. 3 s.h. (w) PROFESSOR GILBERT

219-220. **THE EIGHTEENTH CENTURY.**—Swift, Pope, Defoe, Addison, Steele, and others are studied in the first semester; in the second, Gray, Johnson, Boswell, Goldsmith, the letter writers, and the early Romantic poets. Lectures, oral reports, and a term paper each semester. 6 s.h. (w) PROFESSOR IRVING

221-222. **ENGLISH LITERATURE OF THE EARLY NINETEENTH CENTURY.**—The British Romantic poets and prose writers from Scott to the early Carlyle, with special attention to Wordsworth, Coleridge, and Keats. While these writers will be approached historically, the main object will be to understand and estimate the aesthetic and ethical values of their writings. Discussion and short papers. 6 s.h. (E) VISITING PROFESSOR FOERSTER

223-224. **ENGLISH LITERATURE OF THE LATER NINETEENTH CENTURY.**—Some of the most important works of the period are discussed in class; the background is filled in by lectures and assigned reading. The first semester is devoted chiefly to Carlyle, Dickens, Thackeray, Tennyson, and Browning; the second semester to Arnold, Ruskin, Pater, George Eliot, Meredith, the Pre-Raphaelites, and Swinburne. A term paper each semester. 6 s.h. (w)

PROFESSOR BAUM

227. **LITERARY CRITICISM.**—A study of the Greek and Roman critics, in chronological order but with emphasis on their permanent value rather than on the mere history; also of the Continental and English critics to about 1700. Lectures, reports, and a term paper. 3 s.h. (w) PROFESSOR GILBERT

229-230. **AMERICAN LITERATURE, 1800-1870.**—The writers emphasized in the first semester are Emerson, Thoreau, and Hawthorne; in the second semester, Poe and Melville. In the first semester some attention is given also to Edwards, Franklin, Bryant, Longfellow, Holmes, Whittier, Lowell, and Parkman; and in the second semester to Byrd, Jefferson, Paine, Freneau, Brown, Irving, Cooper, Kennedy, Simms, Timrod, and Lincoln. An oral report and a term paper in the first semester. 6 s.h. (E) PROFESSORS HUBBELL AND LEARY



223-234. AMERICAN LITERATURE SINCE 1870.—Selected works of the chief writers of the period, including Whitman, Lanier, Mark Twain, James, Howells, Emily Dickinson, Crane, Dreiser, and others. The lectures deal with the social background and with the careers of the leading authors. One test and one term paper each semester. 6 s.h. (E) PROFESSOR GOHDES

225. HISTORY OF AMERICAN DRAMA.—The development of the theater and of dramatic literature in America. Emphasis will be placed on the drama as a reflection of the philosophical and social influences which affected American writing in other fields. 3 s.h. (W) PROFESSOR LEARY

227. ENGLISH DRAMA, 1642-1800.—The Heroic Play and the Comedy of Manners of the Restoration period; and the important plays, serious and comic, of the eighteenth century. Lectures, class discussions, and short reports. 3 s.h. (W) ASSOCIATE PROFESSOR WARD

229. SHAKESPEARE.—A study of the plays and poems, with attention to sources, earlier criticism, and the work of Shakespeare's contemporaries. 3 s.h. (W) PROFESSOR GILBERT

241. STUDIES IN DRYDEN.—A detailed study of the poet's non-dramatic work. Lectures on the political, religious, and literary background. A term report. 3 s.h. (W) ASSOCIATE PROFESSOR WARD

247. LITERATURE IN COLONIAL AMERICA.—A study of what was written and read by American colonials. Roger Williams, Edward Taylor, Jonathan Edwards, William Byrd, Benjamin Franklin, and Francis Hopkins are among the writers discussed. Lectures, assigned readings, and occasional papers. 3 s.h. (W) PROFESSOR LEARY

248. LITERATURE IN AMERICA, 1775-1820.—The development of a national literature. Philip Freneau, Timothy Dwight, Joel Barlow, Joseph Dennie, Charles Brockden Brown, William Dunlap, and James Kirke Paulding are among the writers discussed. Lectures, assigned readings, and occasional papers. 3 s.h. (W) PROFESSOR LEARY

251-252. ENGLISH LITERATURE IN THE SEVENTEENTH CENTURY.—A survey of the major works in prose, poetry, and drama from 1600 to the death of Dryden. Lectures, reports, and a term paper each semester.

ASSOCIATE PROFESSOR WARD

269-270. SOUTHERN LITERATURE.—The principal writers discussed during the first semester are Byrd, Jefferson, Wirt, Kennedy, the Cooke brothers, Legaré, Simms, Timrod, Hayne, Longstreet and other humorists, and the poets of the Civil War. Considerable attention is paid to the historical and cultural background and to Northern and British authors who wrote about the South. An oral report and a term paper each semester. 6 s.h. (W) PROFESSOR HUBBELL

#### FOR GRADUATES

349-350. SEMINAR COURSES.—An introduction to bibliography and methods of research. One of these courses is required of all candidates for the degree of Master of Arts. 6 s.h. (W)

#### (a) SIXTEENTH AND SEVENTEENTH CENTURIES.

PROFESSOR GILBERT AND ASSOCIATE PROFESSOR WARD

#### (b) EIGHTEENTH CENTURY.

PROFESSORS IRVING AND BOYCE

#### (c) EARLY NINETEENTH CENTURY.

#### (d) LATER NINETEENTH CENTURY.

PROFESSOR BAUM

#### (e) AMERICAN LITERATURE.

PROFESSORS HUBBELL, GOHDES, AND LEARY

359-360. RESEARCH COURSES.—Opportunity for advanced study; intended specially for candidates for the Ph.D. degree. 3 or 6 s.h. (W) STAFF



## FORESTRY

PROFESSOR KORSTIAN, CHAIRMAN AND DIRECTOR OF GRADUATE STUDIES—308 SOCIAL SCIENCE; PROFESSORS COILE, HARRAR, KRAMER, SCHUMACHER, AND WOLF; ASSOCIATE PROFESSOR ANDERSON

Major and minor work is offered in the scientific aspects of forestry leading to the Master of Arts and Doctor of Philosophy degrees. Work for these degrees may be pursued only in forest-tree physiology, wood anatomy and properties, forest pathology, silvics, forest soils, forest mensuration, forest entomology, and forest economics. College graduates who have had specialized training in botany or soil science and in allied basic subjects, such as physics, chemistry, geology, and zoology, may pursue graduate study and research only in the specialized fields for which their previous work has qualified them. Students who do not have previous training in forestry will be required to complete a minimum of thirty semester hours of approved work in forestry as a preliminary requirement to advanced study for the A.M. and Ph.D. degrees. The holders of these degrees will not be regarded as professionally trained foresters. For information on professional training in forestry, see *Bulletin of the School of Forestry*. For detailed information concerning admission to the Graduate School and for regulations governing candidacy for the A.M. and Ph.D. degrees and for other regulations, consult the proper pages in this *Bulletin*.

All courses listed are expected to be offered in 1951-52.

## FOR SENIORS AND GRADUATES

224. FOREST PATHOLOGY.—Special reference to diseases of forest trees. Prerequisites: Botany 1 and 2, and Forestry 253, or equivalents. 4 s.h.

PROFESSOR WOLF

231. FOREST ENTOMOLOGY.—Morphology, general classification, life histories, and control of insects injurious to forest trees, logs, and lumber. 3 s.h.

ASSOCIATE PROFESSOR ANDERSON

251. SAMPLING METHODS IN FORESTRY.—Statistical background for solution of sampling problems with special reference to sample inventory of a forest property. Offered both semesters. Prerequisite: Forestry SI51. 3 s.h.

PROFESSOR SCHUMACHER

252. FOREST MENSURATION.—Empirical equations and curve fitting appropriate for construction of timber yield tables, tree volume and taper tables; significance tests and graphical solution of equations. Assignments require operation of calculating machines. Prerequisite: Forestry 251. 2 s.h.

PROFESSOR SCHUMACHER

253. DENDROLOGY.—Nomenclature, classification, and identification of woody plants with special reference to species indigenous to southeastern United States and other important forest regions of temperate North America. Laboratory and field work. Prerequisite: one year of botany. 3 s.h.

PROFESSOR HARRAR

257. DESIGN OF FORESTRY EXPERIMENTS AND ANALYSIS OF DATA.—Role of experimental design in field and laboratory, and statistical analysis of data as aspects of scientific method in forest research. 5 s.h.

PROFESSOR SCHUMACHER

259. WOOD ANATOMY.—Study of the physical features and the gross and minute structural characteristics of wood leading to the identification of the commercial woods of the United States, and the important tropical woods used in American wood-working industries. Elementary microtechnique. Prerequisites: one year of botany. 3 s.h. (w)

PROFESSOR HARRAR

260. PROPERTIES OF WOOD.—The chemical nature of wood substance and its industrial chemical derivatives. Wood-moisture relationships; pertinent non-mechanical physical properties; mechanical properties and factors affecting the strength of wood; standard timber testing procedures. Uses of woods as determined by their properties. Prerequisites: Forestry 259, one year of college chemistry; one course of college physics. 3 s.h. (w)

PROFESSOR HARRAR

261. **FOREST SOILS.**—Origin, development, and classification of soils with special emphasis on those developed in humid climates; morphological, physical, and chemical properties of soils in relation to growth of trees; effect of forests on soils. Prerequisites: Chemistry 1 and 2, and Physics 1, are equivalents; physical geology, mineralogy, petrology, and analytical chemistry are also desirable. 3 s.h.

PROFESSOR COILE

263. **SILVICS.**—Ecological foundations of silviculture with special reference to forest site factors; influence of forests on their environment; growth and development of trees and stands; origin, development, and classification of forest communities; methods of studying forest environments. Desirable prerequisites: plant physiology, plant ecology and Forestry 253 and 261, or equivalents. 3 s.h.

PROFESSOR KORSTIAN

275. **FORESTRY POLICY.**—Critical study of forestry movement and development of a forestry policy, particularly in the United States; brief résumé of forestry in important foreign countries; public land laws of the United States; development of federal and state forestry; forestry laws. 2 s.h.

277. **ECONOMICS OF FORESTRY.**—Principles of forest economics. Contributions of land, labor, and capital to income from forestry enterprises; costs of production and maintenance of forest income; forest resources and requirements in products and services; consumption and prices of forest products; forest ownership problems; forest appraisal and comparative valuation; forest fire insurance and forestry credit; forest taxation; timber marketing problems; effect of business cycles and long-term trends upon demand and prices of forest products. Prerequisite: at least one course in the principles of economics. 3 s.h.

#### FOR GRADUATES

323-324. **ADVANCED FOREST PATHOLOGY.**—Advanced study and research on life histories and control of diseases of forest trees to meet individual needs of graduate students. Prerequisites: plant physiology and forest pathology. Credits to be arranged.

PROFESSOR WOLF

351-352. **ADVANCED PHYSIOLOGY OF FOREST TREES.**—Advanced study and research on problems in physiology of forest trees to meet individual needs of graduate students. Prerequisites: plant physiology and plant ecology or silvics. Credits to be arranged.

PROFESSOR KRAMER

354. **FOREST SOIL FERTILITY.**—Experimental approach to the problems of fertility in forest soil. Influence of stand composition on nitrogen transformation. Methods of studying the exchange complex and the significance of base exchange in forest soil fertility. Prerequisites: Forestry 251 and 261, plant physiology, bacteriology and analytical chemistry. 3 s.h.

PROFESSOR COILE

356. **COMPARATIVE FOREST VALUATION.**—Critical analysis of classical and contemporary doctrines of comparative forest valuation. Principles underlying the measurement of forces affecting values of land for forestry and alternative uses and investments of capital. Solution of problems involving procedures based upon these principles. Prerequisite: Forestry 277 or equivalent; courses in economic theory are desirable. 2 s.h.

357-358. **RESEARCH IN FORESTRY.**—Credits to be arranged. Students who have had adequate training may do research under direction of members of the Faculty in the following branches of forestry:

a. **SILVICS.**—Prerequisites: Forestry 253, 261, and 263, or equivalents.

PROFESSOR KORSTIAN

b. **FOREST SOILS.**—Prerequisite: Forestry 261 or equivalent.

PROFESSOR COILE

e. **FOREST ECONOMICS.**—Prerequisite: Forestry 277 or equivalent.

f. **PROPERTIES OF WOOD.**—Prerequisites: Forestry 259 and 260, or equivalents.

PROFESSOR HARRAR

g. FOREST MENSURATION.—Prerequisites: Forestry 5151, 251, and 252, or equivalents. PROFESSOR SCHUMACHER

h. FOREST ENTOMOLOGY.—Prerequisite: Forestry 231 or equivalent. ASSOCIATE PROFESSOR ANDERSON

## GERMANIC LANGUAGES AND LITERATURE

PROFESSOR VOLLMER, CHAIRMAN AND DIRECTOR OF GRADUATE STUDIES—106 SOCIAL SCIENCE; ASSOCIATE PROFESSOR SHEARS

The Department of German offers graduate work leading to the A.M. degree. Students who expect to major in German should have had sufficient undergraduate courses in Germanic languages to enable them to proceed to more advanced work.

Students who wish to take courses in German for a minor should normally have completed a third-year course (in exceptional cases, a second-year course) of College German with acceptable grades.

For 1951-52 the courses planned are 211-212, 213-214.

201-202. GOETHE.—A study of Goethe's life and works. 6 s.h.

203-204. EIGHTEENTH CENTURY.—Eighteenth-century German literature in its relation to contemporary European philosophy. 6 s.h. PROFESSOR VOLLMER

205-206. MIDDLE HIGH GERMAN.—The language and literature of Germany's first classical period. 6 s.h. PROFESSOR VOLLMER

207-208. GERMAN ROMANTICISM.—The course covers the entire field of German Romanticism from 1800 to 1850. 6 s.h. PROFESSOR VOLLMER

209-210. KLEIST, GRILLPARZER, AND HEBBEL.—A study of the leading representatives of German drama in the first half of the nineteenth century. 6 s.h.

211-212. HEINRICH HEINE.—A study of the German poet and his immediate successors in the movement known as *Jungdeutschland*. 6 s.h.

PROFESSOR VOLLMER

213-214. LITERATURE OF THE EMPIRE, 1871-1914.—A study of the literature of this period with special emphasis on a few leading writers such as Fontane, Hauptmann, Mann and Hesse. 6 s.h. ASSOCIATE PROFESSOR SHEARS

### FOR GRADUATES ONLY

301-302. GOTHIC—MIDDLE HIGH GERMAN.—In the first term the essentials of Gothic morphology, phonology, and grammar are investigated, and original Gothic literature is read. In the second term the leading medieval German epics are read in the original. 6 s.h. PROFESSOR VOLLMER

303-304. GERMAN SEMINAR.—A seminar will be conducted in an eighteenth- or nineteenth-century field for properly qualified students. Credit to be arranged. PROFESSOR VOLLMER AND ASSOCIATE PROFESSOR SHEARS

### RELATED COURSES IN OTHER DEPARTMENTS

The following courses in other departments are recommended to students who are majoring in Germanics, as particularly valuable in building a proper background for Germanic studies:

(a) Graduate courses in literature or philology, offered by the ancient and modern language departments, to be selected after consultation with the Germanic Department.

(b) Graduate courses in history and philosophy, offered by those departments, to be selected after consultation with the Germanic Department.

## HISTORY

PROFESSOR LAPRADE, CHAIRMAN AND DIRECTOR OF GRADUATE STUDIES—286 WEST DUKE BUILDING; PROFESSORS CARROLL, CLYDE, LANNING, MANCHESTER, ROBERT, AND SYDNOR; ASSOCIATE PROFESSORS CURTISS, HAMILTON, NELSON, ROPP, AND WOODY; ASSISTANT PROFESSORS FERGUSON AND PARKER

A student who intends to work for an A.M. degree in History must present a total of eighteen semester hours of credit for undergraduate courses in History, of which six hours must be in American History if he plans to take his major in that field.

"A candidate for the degree of Doctor of Philosophy in History is required to pass, prior to the final examination, a preliminary examination (see above, p. 33). Conducted by the student's Supervisory Committee, the preliminary examination covers the minor field and four fields in history, two of which must be the history of the United States and the history of Western Europe. Upon passing the preliminary examination, and not until then, the student is accepted as a candidate for the Ph.D. degree. The final examination covers the dissertation and the related subject matter in major and minor fields." The Department is at present prepared to offer graduate instruction in the following fields of history: The history of Western Europe to 1648; the history of Western Europe since 1648; the history of the United States; the history of England; the history of Latin America; the history of American Foreign Relations; the history of the Modern Far East; the history of Russia.

For 1951-52 the courses planned are as follows: 203-204, 207-208, 215-216, 230, 231, 232, 263-264, 315, 321, 336, 217-218, 221-222, 227-228, 261-262, 305, 317, 327, 343, 211, 312, 320.

## AMERICAN HISTORY

## FOR SENIORS AND GRADUATES

203-204. THE UNITED STATES, 1850-1900.—The rise of sectionalism, secession, wartime problems of the Union and Confederacy, political and economic adjustments of Reconstruction, the status of the Negro, the New South, problems of capital and labor, the agrarian revolt, political parties and reform, the Spanish-American War. 6 s.h.  
ASSOCIATE PROFESSOR WOODY

207-208. SOCIAL AND CULTURAL HISTORY OF THE UNITED STATES.—A study of American life and manners with emphasis on the social effects of a changing economy, including religious, educational, and reform movements. 6 s.h.  
PROFESSOR ROBERT

209-210. CONSTITUTIONAL HISTORY OF THE UNITED STATES, 1763-1860.—A study of the Colonial foundations of American constitutional attitudes, the constitutional aspects of the American Revolution, the framing and ratification of the Constitution, the statehood process and the extension of democracy, the constitutional implications of sectional conflict, and the Supreme Court in its relation to the problems of an industrial America. 6 s.h.

215-216. FOREIGN POLICY AND DIPLOMACY OF THE UNITED STATES.—The work in the first semester covering the period 1775-1877, deals with such topics as the origins and evolution of basic foreign policies; isolation from Europe; paramount interests in Latin America, including the Monroe Doctrine; international co-operation in the Far East. The work in the second semester, covering the period since 1877, deals with such topics as the rise of the new Manifest Destiny; beginnings of American imperialism in Latin America and the Far East; the failure of traditional neutrality in the first World War; postwar conflicts between isolation and collective security; involvement in the second World War. 6 s.h.

PROFESSOR CLYDE

230. THE PORTUGUESE EMPIRE AND THE RISE OF BRAZIL.—The course will deal with Portuguese explorations, the establishment of the Portuguese Empire in the East, the transplanting of Portuguese culture overseas, and the rise of a native Brazilian civilization. 3 s.h.

PROFESSOR MANCHESTER



231-232. THE HISPANIC COLONIES AND REPUBLICS IN AMERICA.—The development of the Iberian states as colonizing powers, the Conquest of America, the Spanish treatment of the Indian, the contest between Spain and other European nations over America, the independence movement, the struggle for stable government, the rise of liberalism with special emphasis upon Mexico from the Revolution of 1910 to the present, and basic inter-American developments. 6 s.h.

PROFESSOR LANNING

233-234. THE INSTITUTIONAL, CULTURAL, AND SOCIAL HISTORY OF HISPANIC AMERICA.—The first semester of this course deals with subject races, the development of mixed breeds, the governmental system, the Church and the Inquisition, and Spanish culture with emphasis upon university subjects. In the second semester the work deals with the political ideas of the wars of independence, revolution and dictatorship, the rise of public education, public health, land reform, and the proletarian movements. 6 s.h.

PROFESSOR LANNING

263-264. AMERICAN COLONIAL HISTORY AND THE REVOLUTION, 1606-1783.—The growth of institutions and economic life in the English colonies; the American Revolution. 6 s.h.

ASSOCIATE PROFESSOR WOODY

265-266. THE WESTWARD MOVEMENT IN THE UNITED STATES.—A study of the progress of settlement from the Atlantic to the Pacific Coast with especial attention to the transmission of culture, developments in transportation, the transition from agrarian to urban communities, the process of state making, and the social, economic, and political effects of the westward march upon the United States as a whole. 6 s.h.

#### FOR GRADUATES

315. SEMINAR IN SOUTHERN HISTORY.—Year course. 2 s.h.

PROFESSOR SYDNOR AND ASSOCIATE PROFESSOR WOODY

321. SEMINAR IN THE HISTORY OF SPAIN, HISPANIC AMERICA, AND INTER-AMERICAN RELATIONS.—Year course. 2 s.h.

PROFESSOR LANNING

336. THE SOUTH IN FEDERAL POLITICS, 1789-1860.—The interests and political actions of the South on such questions as public lands, internal improvements, foreign policy, the tariff and slavery; the political techniques and theories of the South. Year course. 4 s.h.

PROFESSOR SYDNOR

337. SOCIAL AND ECONOMIC LIFE OF THE OLD SOUTH.—Conditions and trends in the South in respect to population movements, transportation, agriculture, slavery, urban life, commerce, manufacturing, religion, education, and other intellectual activities. Year course. 4 s.h.

PROFESSOR SYDNOR

#### EUROPE AND THE FAR EAST

##### FOR SENIORS AND GRADUATES

217-218. EUROPE SINCE 1870.—International relations since the Franco-German War is the chief subject of study in this course; special emphasis is placed upon the underlying economic and political influence. 6 s.h.

PROFESSOR CARROLL

219-220. THE HISTORY OF THE EUROPEAN PROLETARIAT.—This course is concerned chiefly with the origins, expansion, and organization of the industrial working classes of Europe. The following problems are emphasized: the decline of serfdom, the growth of an urban working class and social revolutions in England, France, and Germany prior to the eighteenth century, the results of the Industrial Revolution, and labor movements and theories during the nineteenth and twentieth centuries. 6 s.h.

PROFESSOR CARROLL

221-222. THE AGE OF THE RENAISSANCE.—The decline of characteristics features of medieval civilization and the rise of modern European institutions with particular attention to intellectual movements from Dante to Erasmus. 6 s.h.

ASSOCIATE PROFESSOR NELSON AND ASSISTANT PROFESSOR FERGUSON



225-226. THE AGE OF THE REFORMATION.—A survey of European civilization from 1500 through the Peace of Westphalia. 6 s.h.

ASSOCIATE PROFESSOR NELSON

227-228. THE NAPOLEONIC EMPIRE AND ITS AFTERMATH.—A study in the first term of the conditions favoring the rise of Napoleon, the details of his rise to power, the characteristics of his Empire, its importance for European civilization, its decline and collapse, and the attempts of the conservatives at the Congress of Vienna to restore in part the pre-revolutionary world. The theme in the second term is the gradual disintegration of the settlement of Vienna through the ensuing decades to the unification of Germany in 1871. 6 s.h.

ASSISTANT PROFESSOR PARKER

241-242. NATIONALISM AND REVOLUTIONARY MOVEMENTS IN THE FAR EAST SINCE 1900.—The course deals with the industrialization of modern Japan and the rise of militaristic and totalitarian trends; modernization, republican, and communist movements in China; nationalism in Southeast Asia; American relations with these developments. 6 s.h.

PROFESSOR CLYDE

245-246. WAR IN THE MODERN WORLD.—This course is concerned with the relations between warfare and modern political, economic and social conditions. Special attention is given to the development of British and American military methods and to the events of the American Civil War and the two World Wars. The work in the first semester deals with Clausewitz's theories of warfare and the period from the introduction of gunpowder to 1871; in the second semester there is more detailed analysis of recent land, sea, and air warfare. 6 s.h.

ASSOCIATE PROFESSOR ROPP

261-262. RUSSIA IN THE TWENTIETH CENTURY.—A study of the background of the Revolution of 1917 followed by an analysis of the history and policies of the Soviet state. 6 s.h.

ASSOCIATE PROFESSOR CURTISS

#### FOR GRADUATES

305. SEMINAR IN THE HISTORY OF ENGLAND AND THE BRITISH EMPIRE.—The work consists of practical training in the methods of historical research based on sources for modern British history. Year course. 2 s.h.

PROFESSOR LAPRADE

317. SEMINAR IN RECENT EUROPEAN HISTORY.—Year course. 2 s.h.

PROFESSOR CARROLL

325. BRITISH NATIONALITY AND PUBLIC OPINION.—A study of the various political and social groups that have contended for power in England since the sixteenth century and the methods they used. Year course. 4 s.h.

PROFESSOR LAPRADE

327. MODERN PHASES OF THE ENGLISH CONSTITUTION.—A brief review of the medieval constitution followed by a more intensive study of certain aspects of its development in the sixteenth, seventeenth, and eighteenth centuries. Year course. 4 s.h.

PROFESSOR LAPRADE

343. SEMINAR IN THE HISTORY OF AMERICAN FOREIGN RELATIONS AND THE FAR EAST.—Year course. 2 s.h.

PROFESSOR CLYDE

### HISTORIOGRAPHY AND THE TEACHING OF HISTORY

#### FOR SENIORS AND GRADUATES

211. THE TEACHING OF HISTORY AND THE SOCIAL STUDIES.—The work consists of a discussion of the question of aims and values in teaching history and civics, textbooks, programs of study, methods of instruction, the use of maps and pictures, the making of lesson plans for use in the high school, and other problems of high-school teaching. 3 s.h.

PROFESSOR MANCHESTER

#### FOR GRADUATES

312. SEMINAR IN THE TEACHING OF HISTORY IN COLLEGE.—The work in this course is intended to acquaint students with the problems involved in

teaching history in college. It includes critical observation of the teaching by members of the History Staff in Duke University. Year course. 2 s.h.

PROFESSOR MANCHESTER AND ASSOCIATE PROFESSOR HAMILTON

This course is required of all candidates for the degree of Doctor of Philosophy who are in residence as many as two years in Duke University unless excused therefrom by the Department.

320. HISTORIOGRAPHY.—A critical study of the process of finding, appraising, and interpreting the sources of history and of the presentation of the results in narrative. Works of important historians from Herodotus to the present are analyzed. The student undertakes specific exercises in research, criticism, and narration. There is consideration of such general topics as schools, theories, philosophies, and the function of history. Year course. 4 s.h.

PROFESSOR LAPRADE AND ASSOCIATE PROFESSOR NELSON

This course is required of all candidates for the degree of Doctor of Philosophy who are in residence as many as two years at Duke University unless excused therefrom by the Department.

329. HISTORIOGRAPHY OF THE SOUTH.—Attention is given to the more important printed and manuscript sources and to the writings of the older historians. Bibliographical and research problems are introduced. Year course. 4 s.h.

ASSOCIATE PROFESSOR WOODY

#### RELATED COURSES IN OTHER DEPARTMENTS

Economics 215, 216, 231, 311-312; Political Science 223, 224; Religion 309, 395, 396; Sociology 382.

## MATHEMATICS

PROFESSOR GERGEN, CHAIRMAN—220 PHYSICS BUILDING; PROFESSOR ROBERTS, DIRECTOR OF GRADUATE STUDIES—219 PHYSICS BUILDING; PROFESSORS CARLITZ, ELLIOTT, RANKIN, AND THOMAS; ASSOCIATE PROFESSOR DRESSEL

Graduate work in the Department of Mathematics is offered leading to the A.M. and Ph.D. degrees. The student, in his undergraduate work, must have had courses in differential and integral calculus, and at least 6 semester hours of other courses in mathematics on the junior or senior level.

The A.M. degree with a major in mathematics is awarded primarily on the basis of scholarship. Of the 24 semester hours of course work required for this degree, 18 semester hours must be taken in the Department of Mathematics.

The Ph.D. degree in mathematics is awarded upon the demonstration of ability and training in research. The original dissertation, therefore, becomes the most important of the formal requirements for this degree.

Because of the important literature of mathematics written in German and French, the student must have a practical reading knowledge of these languages near the beginning of his graduate study.

For 1951-52 the courses planned are 235-236, 247-248, 271-272, 285, 286, 291-292, 325-326, and 337-338.

#### FOR SENIORS AND GRADUATES

201. HISTORY OF MATHEMATICS.—Evolution of the number system, arithmetic, geometry, algebra, trigonometry, analytic geometry, calculus, and modern geometry. Brief sketches of mathematicians. Prerequisite: differential calculus. 3 s.h.

PROFESSOR RANKIN

204. TEACHING OF MATHEMATICS.—Fundamental processes, methods of study, mathematical literature, content of courses, applications, use of instruments, correlation of different branches, historical development of secondary school mathematics. Must be preceded or accompanied by integral calculus. 3 s.h.

PROFESSOR RANKIN

226. GALOIS THEORY OF EQUATIONS.—Permutation groups, group of an equation, solvability by radicals. Prerequisite: calculus. 3 s.h. PROFESSOR THOMAS

227-228. THEORY OF NUMBERS.—Congruences, arithmetic functions, compound moduli, quadratic reciprocity, Gauss sums, quadratic forms, sums of squares. Prerequisite: calculus. 6 s.h. PROFESSOR CARLITZ

229-230. ALGEBRAIC NUMBERS.—Ideals, unique factorization, divisors of the discriminant, determination of the class number. Prerequisite: theory of equations. 6 s.h. PROFESSOR CARLITZ

235-236. ABSTRACT ALGEBRA.—Groups, fields, rings, matrices, quadratic and bilinear forms, general Galois theory, hypercomplex systems. Prerequisite: calculus. 6 s.h. PROFESSOR CARLITZ

247-248. ARITHMETIC OF POLYNOMIALS.—Field theory, detailed study of finite fields, special polynomials and functions, valuation theory, the zeta function. Prerequisite: Mathematics 235 or consent of the instructor. 6 s.h.

PROFESSOR CARLITZ

250. HIGHER GEOMETRY.—Properties of the triangle, transversals, harmonic properties of figures, poles, polars, inversions. 3 s.h. PROFESSOR THOMAS

255-256. PROJECTIVE GEOMETRY.—Postulational, synthetic treatment centering around Desargues' theorem and the principle of projectivity. Conics, coordinates, order, continuity, metric properties. Prerequisites: calculus. 6 s.h.

PROFESSOR THOMAS

258. FINITE DIFFERENCES.—Interpolation formulas, symbolic methods, polynomials of Bernoulli and Euler, numerical differentiation and integration, difference equations. Prerequisite: calculus. 3 s.h. PROFESSOR CARLITZ

271-272. INTRODUCTORY TOPOLOGY.—Topological properties of Euclidean spaces, set-theoretic and combinatorial methods. Prerequisite: calculus. 6 s.h.

PROFESSOR ROBERTS

275. PROBABILITY.—Combinatory analysis, mean values, Bernoulli's theorem, probability integral, applications to statistics. Prerequisite: calculus. 3 s.h.

ASSOCIATE PROFESSOR DRESSEL

285. MATHEMATICAL ANALYSIS FOR CHEMISTS AND PHYSICISTS.—Vectors, line and surface integrals, tensors, complex variables, differential and integral equations. Prerequisite: Mathematics 53. 3 s.h.

ASSOCIATE PROFESSOR DRESSEL

286. MATHEMATICAL ANALYSIS FOR CHEMISTS AND PHYSICISTS.—Wave equation, Fourier series, heat equations, telegraphic equation, Legendre polynomials, Bessel functions, Schrödinger's equation. Prerequisite: Mathematics 53. 3 s.h.

ASSOCIATE PROFESSOR DRESSEL

291-292. THEORY OF FUNCTIONS.—Limits, implicit functions, power series, double series, Cauchy's theorem and its applications, residues, Riemann surfaces, conformal mapping. Prerequisite: calculus. 6 s.h.

PROFESSOR THOMAS

#### FOR GRADUATES

301-302. ALGEBRAIC GEOMETRY.—Homogeneous coordinates, singular points and lines, Newton's polygon, Plücker's equations, intersections of curves. Prerequisite: Mathematics 255-256. 6 s.h.

PROFESSOR THOMAS

325-326. REAL VARIABLE.—Number system, Lebesgue and Stieltjes integrals, topics in Fourier series. Prerequisite: Mathematics 291-292. 6 s.h.

PROFESSOR GERGEN

331-332. COMPLEX VARIABLE.—Analytic continuation, univalent functions, meromorphic functions, analytic functions of several complex variables. Prerequisite: Mathematics 291-292. 6 s.h.

333-334. ANALYTIC THEORY OF NUMBERS.—Distribution of primes, primes in an arithmetic progression, Waring and Goldbach problems. Prerequisite: Mathematics 291-292. 6 s.h.

PROFESSOR CARLITZ

337-338. **EXISTENCE THEOREMS.**—Systems of partial differential equations, Pfaffian systems, theorems of Cauchy, Riquier, and Cartan, singular integral varieties. Prerequisite: Mathematics 291-292. 6 s.h.  
 PROFESSOR THOMAS

341-342. **INTEGRAL EQUATIONS.**—Volterra and Fredholm integral equations, application to boundary problems of differential equations. Prerequisite: differential equations and advanced calculus. 6 s.h.  
 PROFESSOR ELLIOTT

343-344. **ORDINARY DIFFERENTIAL EQUATIONS.**—Solution by separation of variables, exact differentials, integrating factors, solution in series. Cauchy's existence theorem, linear differential systems, singular points, partial differential equations equivalent to ordinary systems. Prerequisite: Mathematics 291-292. 6 s.h.  
 PROFESSOR THOMAS

351-352. **DIFFERENTIAL GEOMETRY.**—Curves and surfaces in three-dimensional Euclidean space, applicability, differential parameters, Riemannian geometry of  $n$ -space. Prerequisite: calculus. 6 s.h.  
 PROFESSOR THOMAS

371-372. **DIMENSION THEORY.**—Abstract spaces, separation theory for Euclidean spaces, dimension theory. Prerequisite: Mathematics 271-272. 6 s.h.  
 PROFESSOR ROBERTS

373-374. **CONTINUOUS TRANSFORMATIONS.**—Recent results concerning a number of special types of continuous transformations. Prerequisite: Mathematics 271-272. 6 s.h.  
 PROFESSOR ROBERTS

## PHILOSOPHY

PROFESSOR NEGLEY, CHAIRMAN—3-1 WEST DUKE BUILDING; PROFESSOR PATTERSON, DIRECTOR OF GRADUATE STUDIES—3-1 WEST DUKE BUILDING; PROFESSORS GILBERT AND WIDGERY; ASSOCIATE PROFESSOR MCLARTY; ASSISTANT PROFESSOR WELSH

Candidates for the Ph.D. degree in Philosophy will be expected to acquire teaching proficiency in the general fields of philosophical investigation, and to demonstrate scholarly ability in at least one of those fields. The achievement of specialized competence will necessitate adequate acquaintance with pertinent fields of research. The student will be encouraged to take as much work in minor departments as time permits. Minor study need not be confined to a single department; individual programs will be arranged to suit the students' needs and interests.

The preliminary examinations in Philosophy are evaluated in terms of the ability of the student to continue graduate study; they are not to be interpreted as a comprehensive survey of course study at the graduate level. The student in Philosophy will be expected to fulfill the language requirements and pass the departmental preliminary examinations before the end of the third semester of residence. Students who enter with an A.M. degree will be expected to pass the preliminary examinations before the end of the first year of residence. Information about general requirements, or about preliminary examinations, may be obtained by addressing a request to the Department.

For 1951-52 the courses planned are 201-202, 203, 205, 208, 209-210, 211, 217, 225, 236, 238, 301a-302a, 307, 331-332, 341.

### FOR SENIORS AND GRADUATES

201-202. **THE PHILOSOPHY OF ART.**—Analysis with the aid of examples of general terms used in the discussion of art. Reference to recent aesthetic theories. 6 s.h. (E)  
 PROFESSOR GILBERT

203. **CONTEMPORARY ETHICAL THEORIES.**—Reading and discussion of twentieth-century American and British moralists. 3 s.h.  
 PROFESSOR NEGLEY

205. **THE PHILOSOPHY OF HISTORY.**—An inquiry into the logic and methodology of the knowledge of history, and into the metaphysical implications of history. 3 s.h.  
 PROFESSOR WIDGERY

208. **POLITICAL PHILOSOPHY.**—Analysis of the structure of social organization, with particular reference to the function of law in democratic politics. 3 s.h.  
 PROFESSOR NEGLEY



209-210. THE PHILOSOPHY OF RELIGION.—A critical consideration of the data of empirical religion and the constructive development of modern philosophy of religion. 6 s.h. PROFESSOR WIDGERY

211. HISTORY OF ANCIENT PHILOSOPHY.—Topic for 1951-52: The Later Dialogues of Plato. 3 s.h. ASSOCIATE PROFESSOR McLARTY

212. HISTORY OF MODERN PHILOSOPHY.—3 s.h. PROFESSOR PATTERSON

213-214. HISTORY OF AESTHETICS.—Theories of art and beauty from Pythagoras to Croce. 6 s.h. (E) PROFESSOR GILBERT

217. THE PHILOSOPHY OF ARISTOTLE.—Prerequisite: 93 or 211. 3 s.h. ASSOCIATE PROFESSOR McLARTY

218. MEDIAEVAL PHILOSOPHY.—A study of the philosophy of the Middle Ages with special attention to selected texts from the works of Christian, Jewish and Arabian philosophers. 3 s.h. PROFESSOR PATTERSON

223. CONTEMPORARY PHILOSOPHY.—3 s.h. PROFESSOR PATTERSON

225. LOCKE, BERKELEY, HUME.—3 s.h. ASSISTANT PROFESSOR WELSH

231. PHILOSOPHY OF SCIENCE.—An historical and critical survey of the basic philosophical ideas underlying the development of modern science. 3 s.h.

232. PHILOSOPHY OF SCIENCE II.—Philosophical implications of the methods employed in modern science. 3 s.h.

236. ORIENTAL PHILOSOPHY I. CHINESE PHILOSOPHY.—3 s.h. PROFESSOR WIDGERY

238. ORIENTAL PHILOSOPHY II. INDIAN PHILOSOPHY.—3 s.h. PROFESSOR WIDGERY

241. LOGIC.—Fundamental principles of valid deductive reasoning. 3 s.h.

242. SCIENTIFIC METHODOLOGY.—A survey of the methods used in the various natural and social sciences. 3 s.h.

#### FOR GRADUATES

301a-302a, 301b-302b. SEMINAR IN PHILOSOPHY.—Special problems, chiefly metaphysical. 3 s.h. PROFESSOR WIDGERY

307. SEMINAR: KANT.—3 s.h. PROFESSOR NEGLEY

308. SEMINAR: HEGEL.—3 s.h.

331-332. SEMINARS IN SPECIAL FIELDS OF PHILOSOPHY.—3 s.h. each semester.

(a) LOGIC; (aa) PHILOSOPHY OF SCIENCE.

(b) ETHICS; (bb) POLITICAL PHILOSOPHY. PROFESSOR NEGLEY

(c) AESTHETICS. PROFESSOR GILBERT

(d) PHILOSOPHY OF RELIGION; (dd) HISTORY. PROFESSOR WIDGERY

(e) and (ee) HISTORY OF PHILOSOPHY. PROFESSOR PATTERSON

341. SEMINAR: PROBLEMS OF POLITICAL AND LEGAL PHILOSOPHY.—3 s.h. PROFESSOR NEGLEY

## PHYSICS

PROFESSOR NIELSEN, CHAIRMAN—119 PHYSICS BUILDING; PROFESSOR NORDHEIM, DIRECTOR OF GRADUATE STUDIES—209 PHYSICS BUILDING; PROFESSORS HATLEY, GORDY, NEWSON, AND SPONER; VISITING PROFESSOR WANG; ASSOCIATE PROFESSORS GREULING AND SMITH

The Department of Physics offers graduate work leading to the A.M. and Ph.D. degrees. Course work is designed to give a broad basic foundation in classical



and modern physics. All graduate students will be expected to acquire a thorough knowledge of the various branches of classical physics and some familiarity with modern physics and with basic laboratory skills. They will be required to take such course work in the 200 number courses as may be necessary to obtain this foundation.

The student will be required to take such course work as will best be adapted to the kind of work he will subsequently specialize in and to the kind of research he will undertake. The choice of minor will be similarly determined.

Since a practical reading knowledge of French and German is highly desirable for the student of physics, he should satisfy these language requirements as early as possible.

For 1951-52 the courses planned are: 201-202, 203-204, 213-214, 217-218, 219, 220, 243, 307, 324, 331, 335, 344, 351-352, 353-354.

201-202. MECHANICS.—The fundamental principles of statics and the dynamics of particles and rigid bodies. Three recitations each week. 6 s.h. (w)

VISITING PROFESSOR WANG

203-204. ELECTRICITY AND MAGNETISM.—Fundamentals of electricity and magnetism. Electrostatics and magnetostatics. Direct current circuits, and networks—bridges, potentiometers, galvanometers, alternating current circuits and networks. Electromagnetic waves. 6 s.h. (w)

ASSOCIATE PROFESSOR SMITH

205. SPECTROSCOPY.—The theory of optical instruments and a discussion of spectroscopic laws and of information obtained by spectroscopic methods. Three lectures and one three-hour laboratory each week. 4 s.h. (w)

PROFESSOR SPONER

213-214. CONTEMPORARY PHYSICS.—A course which covers the fundamental concepts and the experimental basis of modern physics. Three lectures each week. 6 s.h. (w)

VISITING PROFESSOR WANG

217-218. ADVANCED PHYSICS LABORATORY.—Measurements involving the fields of mechanics, electricity, magnetism, heat, sound, optics, and modern physics. 2-6 s.h. (w)

THE STAFF

219. INTRODUCTION TO ELECTRONICS.—Fundamentals of electron tubes. Motion of charged particles, space charge, gaseous conduction. Electron tube circuits. Three hours of lecture and one three-hour laboratory per week. 4 s.h. (w)

PROFESSOR GORDY OR ASSOCIATE PROFESSOR SMITH

220. ELECTRON CIRCUIT ANALYSIS.—Linear and non-linear circuit analysis, electric oscillations, operation of filters, Fourier analysis of wave phenomena, coupling in electrical circuits. 3 s.h.

PROFESSOR GORDY OR ASSOCIATE PROFESSOR SMITH

243. ELEMENTARY NUCLEAR PHYSICS.—Radioactivity, nuclear transmutations, properties of nuclear radiation and sources of nuclear particles. 3 s.h. (w)

PROFESSOR NEWSON

#### FOR GRADUATES

303. THERMODYNAMICS.—Fundamental laws of thermodynamics and their applications to physics and chemistry. 3 s.h.

PROFESSOR SPONER

305. KINETIC THEORY OF MATTER.—Gas laws, Maxwell's distribution law; mean free path; viscosity; heat conductivity; diffusion; phenomena in gases at low pressure; specific heat; entropy; probability and reaction kinetics. 3 s.h.

ASSISTANT PROFESSOR GREULING

307. ADVANCED MECHANICS I.—General dynamics of particles, systems of particles, and rigid bodies. The methods of Lagrange and Hamilton; general principles of mechanics. 3 s.h.

PROFESSOR NORDHEIM

308. ADVANCED MECHANICS II.—Mechanics of deformable bodies. Statics and dynamics of elastic and fluid media. 3 s.h. (w)

PROFESSOR NORDHEIM

315-316. PRINCIPLES OF QUANTUM THEORY.—Original and fundamental concepts of quantum theory; wave and matrix mechanics; theory of measurements; exclusion principle and electronic spin. 6 s.h.

PROFESSOR NORDHEIM

318. THEORY OF ELECTRICITY AND MAGNETISM.—Electrostatics and potential theory. Dielectric and magnetic media. The magnetic field of currents and the law of induction. AC currents and networks. 3 s.h.

ASSISTANT PROFESSOR GREULING

319. ELECTRODYNAMICS.—Maxwell's system of electrodynamics. Production and propagation of electromagnetic waves. Wave optics. Theory of interference and diffraction. Crystal optics. 3 s.h.

ASSISTANT PROFESSOR GREULING

320. THEORY OF ELECTRONS.—Lorentz' equations of electrodynamics. Classical theories of dispersion, magnetism, and conductivity. Theory of relativity. 3 s.h.

ASSISTANT PROFESSOR GREULING

323. THEORY OF ATOMIC SPECTRA.—Excitation of spectra, computation of wave lengths from photographs of spectra, study of the structure of atomic spectra with applications. 3 s.h.

PROFESSOR SPONER

324. THEORY OF MOLECULAR SPECTRA.—A study of the structure of molecular spectra with applications. 3 s.h.

PROFESSOR SPONER

331. MICROWAVE THEORY AND APPLICATION.—Microwave generators, cavity resonators, transmission lines, radiation propagation and detection. 4 s.h.

PROFESSOR GORDY

335. MICROWAVE SPECTROSCOPY.—Application of microwaves in the determination of molecular, atomic, and nuclear properties. Stark and Zeeman effects in microwave spectroscopy. Magnetic resonance absorption. 3 s.h. (w)

PROFESSOR GORDY

340. STRUCTURE OF MATTER.—Selected topics dealing with the constitution of matter such as crystal structure and x-rays, the solid state and problems of molecular structure. 3 s.h.

PROFESSOR SPONER

341. ADVANCED TOPICS IN QUANTUM THEORY.—Quantum theory of radiation and collisions with special reference to nuclear physics. Prerequisite: Physics 315-316. 3 s.h.

PROFESSOR NORDHEIM

344. ADVANCED NUCLEAR PHYSICS.—The deuteron, nuclear forces, scattering of elementary particles, beta-radiation. Other aspects of nuclear physics susceptible to theoretical interpretation. 3 s.h. (w)

PROFESSOR NEWSON

351-352. SEMINAR.—A series of weekly discussions on topics related to the research projects under investigation in the Department. 2 s.h.

STAFF

353-354. THESIS SEMINAR.—Students who are properly qualified may carry on research work under the direction of members of the Staff. 6 s.h.

STAFF

## POLITICAL SCIENCE

PROFESSOR RANKIN, CHAIRMAN—308 LIBRARY; PROFESSOR WILSON, DIRECTOR OF GRADUATE STUDIES—405 NEW TOWER, LIBRARY; PROFESSORS COLE, CONNERY, HALLOWELL, AND VON BECKERATH; ASSISTANT PROFESSOR TRAVIS

The Department of Political Science offers graduate work leading to the A.M. and Ph.D. degrees. Instruction is designed to prepare the student for teaching, for government service, and for other work related to public affairs. Before undertaking graduate study in Political Science, a student is ordinarily expected to have previously completed at least 12 semester hours of course work in Political Science, including some work in American government.

Fields of political science in which instruction is at present offered for candidates for the degree of Doctor of Philosophy are the following: American Government and Constitutional Law; Comparative Government; Political Theory; American State and Local Government; International Law; Public Administration. Candidates for the degree of Doctor of Philosophy who propose to major in political science must elect five fields, including Comparative Government and Political Theory; at least one of the five fields must be taken in a department other than the Department of Political Science.

In 1951-52 the courses planned are 209, 221, 223, 224, 225, 226, 227-228, 229, 230, 231, 235, 241, 242, 246, 271, 291, 310, 321, 325, 328, and 341.

FOR SENIORS AND GRADUATES

207. AMERICAN CONSTITUTIONAL LAW AND THEORY.—A study of leading principles of American government, as developed through judicial interpretation of the Constitution. 3 s.h. PROFESSORS WILSON AND RANKIN

209. STATE AND LOCAL GOVERNMENT IN THE UNITED STATES.—A study of the historical development of state and local governments, their present organization, their relation to each other and to the federal government. 3 s.h. PROFESSOR RANKIN

211. POLITICAL INSTITUTIONS OF THE FAR EAST.—A study of the governmental systems of Japan, Korea, and China from Chou Dynasty to the present. 3 s.h.

212. INTERNATIONAL POLITICS OF THE FAR EAST.—A study of changing power relationships in the Orient since the arrival of the Europeans. 3 s.h.

221. INTERNATIONAL PUBLIC ORGANIZATION.—A study of the structure and functioning of the United Nations system and of selected organizations outside that system. 3 s.h. ASSISTANT PROFESSOR TRAVIS

223. POLITICAL THOUGHT TO THE SEVENTEENTH CENTURY.—A survey of political thought from the time of Plato to the close of the sixteenth century. 3 s.h. PROFESSOR WILSON

224. MODERN POLITICAL THEORY.—Political theories of the seventeenth and eighteenth centuries, and of the first half of the nineteenth, with a study of their influence upon modern political institutions. 3 s.h. PROFESSOR HALLOWELL

225. COMPARATIVE GOVERNMENT.—A comparative study of modern political institutions with particular attention to European constitutional government and politics. 3 s.h. PROFESSOR COLE

226. COMPARATIVE GOVERNMENT.—A comparative study of modern political institutions with particular attention to European authoritarian and dictatorial government and politics. 3 s.h. PROFESSOR COLE

227-228. INTERNATIONAL LAW.—Elements of international law, particularly as interpreted and applied by the United States. 6 s.h. PROFESSOR WILSON

229. RECENT AND CONTEMPORARY POLITICAL THEORY.—An analytical study of liberalism, socialism and fascism, with special attention to the political theories of the nineteenth and twentieth centuries. Open to students who have completed course 224 or its equivalent. 3 s.h. PROFESSOR HALLOWELL

230. AMERICAN POLITICAL INSTITUTIONS.—A study of the formation and development of institutions of the national government in the United States, with historical and analytical treatment. 3 s.h. PROFESSOR RANKIN

231. AMERICAN POLITICAL THEORY.—An analysis of the main currents in American political thought from colonial beginnings to the present day, with emphasis upon the development of liberalism in America. 3 s.h. PROFESSOR HALLOWELL

235. THE BRITISH COMMONWEALTH.—An analysis of the political relationships between the members of the British Commonwealth and a comparative study of the governments of the British Dominions, with particular reference to Canada. 3 s.h. PROFESSOR COLE

241. NATIONAL ADMINISTRATION.—The development of the federal administrative structure, its present organization, working concepts and processes in the United States. 3 s.h. PROFESSOR CONNERY

242. ADMINISTRATIVE MANAGEMENT.—The role of the executive in administrative planning, organization, direction and supervision, with some reference to methods of work simplification and management improvement. 3 s.h. PROFESSOR CONNERY

244. ADMINISTRATIVE LAW.—The law of the administrative process, including the nature of regulatory authority, the status and liability of public officers, administrative tribunals and judicial review of administrative action. 3 s.h.

PROFESSOR CONNERY

246. GOVERNMENT ADMINISTRATION AND PUBLIC POLICY.—Through use of the laboratory technique, a consideration of the type of administrative problems that the United States Government encounters in the field of public policy and their possible solution. 3 s.h.

PROFESSOR CONNERY

247. REGULATORY ADMINISTRATION.—A survey of the problems involved in the exercise of administrative discretion, including methods of administrative adjudication, judicial control over administrative action, and extra-legal relations. 3 s.h.

PROFESSOR CONNERY

252. SPANISH-AMERICAN CONSTITUTIONALISM.—A comparative study of the nature, sources, and use of political authority in the constitutional law of Argentina, Chile, Colombia, and Uruguay. 3 s.h.

271. SOCIOPOLITICS AND CAPITALISM.—Labor and labor policies in Western Europe and the United States in the nineteenth and twentieth centuries; the development of the monopoly power and political power of labor in recent decades. 3 s.h.

PROFESSOR VON BECKERATH

291. MUNICIPAL GOVERNMENT.—A study of problems relating to the structural system and activities of municipalities in the United States. 3 s.h.

PROFESSOR RANKIN

292. MUNICIPAL ADMINISTRATION.—A study of principles and methods of municipal administration in the United States. 3 s.h.

PROFESSOR RANKIN

#### FOR GRADUATES

310. SEMINAR IN STATE GOVERNMENT.—Open to students who have completed course 209 or its equivalent. 3 s.h.

PROFESSOR RANKIN

311. SEMINAR IN FAR EASTERN POLITICS.—Open to students who have completed course 211 or its equivalent. 3 s.h.

321. SEMINAR IN POLITICAL THEORY.—Open to students who have completed 6 semester hours in Political Science 223, 224, 229, 231 or their equivalents. 3 s.h.

PROFESSOR HALLOWELL

325. SEMINAR IN COMPARATIVE GOVERNMENT.—Open to students who have completed course 225 and 226 or their equivalents. 3 s.h.

PROFESSOR COLE

328. SEMINAR IN INTERNATIONAL LAW.—Open to students who have completed course 227-228 or its equivalent. 3 s.h.

PROFESSOR WILSON

341. SEMINAR IN PUBLIC ADMINISTRATION.—Open to students who have completed course 241 and 242 or their equivalents. 3 s.h.

PROFESSOR CONNERY

#### RELATED COURSES IN OTHER DEPARTMENTS

Economics 215, 216, 233, 234, 237-238, 365; History 215-216, 217-218, 234, 261-262; Philosophy 208; Religion 224, 394; Sociology 382.

## PSYCHOLOGY

PROFESSOR RODNICK, CHAIRMAN—107 BIVINS HALL; PROFESSOR ZENER, DIRECTOR OF GRADUATE STUDIES—205 PSYCHOLOGICAL LABORATORY; PROFESSOR RODNICK, DIRECTOR OF CLINICAL TRAINING; PROFESSORS ADAMS, DAI, KUDER, AND LUNDHOLM; ASSOCIATE PROFESSORS BANHAM AND KOCH; ASSISTANT PROFESSORS COHEN AND GARMETZ; DR. KLOPPER

The Department of Psychology offers advanced work in general experimental psychology leading to the A.M. and Ph.D. degrees and in clinical psychology leading to the Ph.D. only.

Whatever field of psychology in which the student eventually specializes, he is



required to have a thorough background in the facts, methods, and theories of general psychology. Graduate programs are arranged to achieve this common background primarily during the first year, with specialization in course work reserved for subsequent years.

Normally, the candidate for the Ph.D. degree is expected, by the end of his second year, in addition to having worked out a program of studies, to have passed his language examinations, a departmental qualifying examination in his area of intended doctoral research, and the preliminary examination. By this time also his doctoral dissertation subject would be formulated. Emphasis is laid upon the completion of the dissertation, directed by a member of the staff, demonstrating competence and independence in the investigation of an original and significant problem.

As an integral part of their academic work during the first, second and fourth years, students specializing in clinical psychology will undertake field work in a variety of clinical settings. In addition, they will normally spend the third year in an appropriate and approved internship. The fourth year will be spent in residence at Duke University to complete the dissertation.

The field of minor work is not restricted, but it may be pointed out that the fields most relevant to graduate study in psychology are sociology and anthropology, physiology, neuroanatomy, philosophy of science, and education.

Further details concerning the program of studies in psychology may be obtained from the Director of Graduate Studies in Psychology.

For 1951-52 the courses planned are 201-202, 203, 206, 209, 212, 215, 221-222, 223 (spring semester only), 266, 302, 303-304, 305, 306, 308, 309, 310, 312, 313, 320, 322, 335-336, 341, 342, 371.

#### FOR SENIORS AND GRADUATES

**201-202. PROSEMINAR.**—An integrated core curriculum in general psychology, designed to provide an advanced background in the principles, and the empirical and theoretical methods of the major fields of psychology. The topics include: scientific methods in psychology, biological foundations of behavior, motivation, learning, perception, behavior development, personality, the social determinants of behavior, and contemporary psychological theories. Required of all first year students. 9 s.h. each semester.

ASSOCIATE PROFESSOR KOCH; PROFESSORS ADAMS, KUDER, RODNICK, AND ZENER; ASSOCIATE PROFESSOR BANHAM

**203. DYNAMIC PSYCHOLOGY: CONATION AND OUR CONSCIOUS LIFE.**—A systematic presentation of the psychology of adult human achievements, adaptive as well as creative, with emphasis upon the significance for these endeavors of the acts of experiencing. 3 s.h.

PROFESSOR LUNDHOLM

**\*204. MOTIVATION AND LEARNING.**—Social and biological conditions of the operation, modification, and organization of motivational systems. 3 s.h.

PROFESSOR ZENER AND ASSOCIATE PROFESSOR KOCH

**206. SOCIAL PSYCHOLOGY.**—Kinds of membership character; psychology of social movements; propaganda; revolution; nationalism; war. 3 s.h.

PROFESSOR ADAMS

**\*207. PSYCHOLOGY OF MEMORY, THINKING, PERCEIVING.**—A study of thinking, remembering, and perceiving with reference to the basic processes involved and their determining conditions, with emphasis upon organization, meaning, and motivation. 3 s.h.

PROFESSOR ZENER

**209. EXPERIMENTAL METHODS IN HUMAN PSYCHOLOGY.**—A study of methods for the control, identification, and recording of essential variables in human psychological situations, with consideration of the relation of experimental techniques to problem formulation and psychological theory. Laboratory and lectures, and discussions. 3 s.h. [Spring semester only.]

PROFESSOR ZENER

\* Not open to students who have taken Psychology 201-202.



212. **PHYSIOLOGICAL PSYCHOLOGY.**—An advanced study of the interrelationships between psychological and physiological processes. Prerequisites: courses in Neuro-anatomy and in Physiology (M204 and M261, or Zoology 324, or their equivalents). 3 s.h.  
 PROFESSOR ZENER

215. **DEVELOPMENTAL PSYCHOLOGY.**—The environmental forces conditioning the development of personality structure and the mechanisms contributing to psychological growth; critical periods in character formation from infancy to senescence. 3 s.h.  
 PROFESSOR ADAMS

221-222. **PROPRACTICUM.**—Lectures, demonstrations and practice in the use of basic procedures, projective and non-projective, employed in clinical psychology; principles of interpretation and reporting of test findings. Laboratory periods will be held in clinical field facilities. 3 s.h. each semester.  
 ASSISTANT PROFESSOR GARMETZ AND CLINICAL STAFF

223. **ABNORMAL PSYCHOLOGY.**—A systematic presentation of the psychology of functional mental disorders with emphasis on its bearing upon general psychological theory. 3 s.h.  
 PROFESSOR LUNDHOLM

224. **PSYCHOLOGY OF AESTHETICS.**—3 s.h. PROFESSOR LUNDHOLM

226. **PSYCHOLOGY: HISTORICAL AND THEORETICAL.**—3 s.h.  
 PROFESSOR ZENER

236. **THEORETICAL PSYCHOLOGY.**—This course is devoted to the analysis of techniques of theory construction in psychology. The discussion of these methodological issues is co-ordinated with the analysis of concrete formulations in contemporary psychological theory.\* 3 s.h.  
 ASSOCIATE PROFESSOR KOCH

265. **FUNDAMENTAL STATISTICAL PROCEDURES IN PSYCHOLOGY.**—A course in the application of the more common statistical principles and techniques used in psychological research. Measures of central tendency, variability, and correlation, and the elements of sampling theory are studied with illustrative data from various problem areas in psychology. 3 s.h.  
 PROFESSOR KUDER

266. **ADVANCED STATISTICS OF PSYCHOLOGICAL INVESTIGATION.**—A study of various more advanced statistical principles and procedures employed in psychological research. The course includes the topics of multiple and partial correlation, analysis of variance as employed in controlled experimentation, measures of correlation other than product-moment correlation, reliability and validity of measures, and fundamental concepts of factor analysis. Prerequisite: Psychology 265 or its equivalent. 3 s.h.  
 PROFESSOR KUDER

305. **PSYCHOPATHOLOGY.**—An examination of behavior disorders, with particular emphasis on explanatory concepts and the evidence from research in this field. 3 s.h.  
 PROFESSOR RODNICK

306. **SEMINAR IN DEVELOPMENTAL PSYCHOLOGY.**—2 or 3 s.h.  
 PROFESSOR ADAMS

308. **SEMINAR IN PSYCHOPATHOLOGY AND PERSONALITY THEORY.**—3 s.h.  
 PROFESSOR RODNICK

309. **THEORY OF LEARNING.**—3 s.h. PROFESSOR ADAMS

310. **SEMINAR: SELECTED PROBLEMS IN THE DYNAMICS OF BEHAVIOR.**—3 s.h. PROFESSOR ZENER

312. **SEMINAR IN THEORETICAL PSYCHOLOGY.**—3 s.h. PROFESSOR KOCH

313. **ADVANCED EXPERIMENTAL METHODS: SELECTED PROBLEMS.**—This course provides intensive practical experience in problems of experimental design and technique. Each student will work on an individual research project under the guidance of the staff. Issues related to such research, and to general questions of experimental methodology, will be dealt with in lectures and seminar-type discussions. 3 s.h. PROFESSORS RODNICK AND ZENER; ASSOCIATE PROFESSOR KOCH

320. **SEMINAR IN THE THEORY OF MENTAL TESTS.**—3 s.h.  
 PROFESSOR KUDER

322. SEMINAR IN PERSONNEL PSYCHOLOGY.—3 s.h. PROFESSOR KUDER

331. INTERVIEWING METHODS OF CASE STUDY.—3 s.h.

ASSOCIATE PROFESSOR BANHAM

335-336. CLINICAL PSYCHOLOGY PRACTICUM.—Seminar discussion and supervised field experience in the application of basic psychological procedures and principles to clinical cases in a variety of institutional settings. Prerequisite: Psychology 221 and 222. 3 s.h. fall semester, 6 s.h. spring semester.

ASSISTANT PROFESSOR COHEN AND CLINICAL STAFF

341. SOCIETY, CULTURE AND BEHAVIOR DISORDERS.—A critical survey of current theories of the structure and genesis of psychoneurosis, with particular stress on psychoneurotic disturbances as problems of the self in relation to society and culture. 3 s.h.

PROFESSOR DAI

342. PRINCIPLES OF PSYCHOTHERAPY.—A critical study of the current methods of treating behavior disorders, such as brief psychoanalytic therapy, non-directive methods and group procedures. Stress is laid on integration of the best workable procedures into a set of psychotherapeutic principles in a socio-psychological frame of reference as discussed in Psychology 341 which is a prerequisite. Case material will be used for purposes of illustration. 3 s.h.

PROFESSOR DAI

371. PRE-SCHOOL BEHAVIOR PROBLEMS.—The diagnosis and treatment of behavior problems, to include: types and selection of problems for study, analysis and statement of the problem, systematic inquiry into causes, planning and allocating treatment programs, follow-up inquiry, progressive adaptation of treatment, preventive measures. Prerequisites: at least one course in child development, in mental measurement, and in abnormal psychology. 3 s.h.

ASSOCIATE PROFESSOR BANHAM

#### RELATED COURSES IN OTHER DEPARTMENTS

Education 208A, 208B, 209, 217, 227, 228, 258, 318; Philosophy 203, 208, 223, 225, 231, 242, 331-332a; Sociology 211, 212, 238, 243, 246, 249, 271, 276, 330, 380; Zoology 229, 324, 341, 351-352, 355-356; Physiology 261-262; Anatomy 204.

### RELIGION

PROFESSOR SMITH, DIRECTOR OF GRADUATE STUDIES—302 DIVINITY SCHOOL; PROFESSORS CLARK, CUSHMAN, DAVIES, PETRY, SPENCE, AND STINESPRING; ASSOCIATE PROFESSOR BEACH; ASSISTANT PROFESSOR BROWNLEE

The Department of Religion offers graduate work leading to the A.M. and Ph.D. degrees. Students may major in one of three fields: (1) Biblical Studies; (2) Studies in Church History; and (3) Studies in Christian Thought. They will be expected to take such courses in one or both of the other fields as will conduce to an adequate understanding of their chosen fields of specialization.

In addition to course work in these major fields, students will take such other courses in cognate fields as will contribute to the enrichment of their major studies. For those majoring in Biblical Studies, courses in Ancient Language and Literature are suggested; for those majoring in Church History, courses in History are suggested; and for those majoring in Studies in Christian Thought, courses in Philosophy, Political Science, and Sociology are suggested.

Students who intend to become candidates for the Ph.D. degree should take the required language examinations in both French and German not later than the beginning of the second year of residence.

For 1951-52 the courses planned are 201-202, 207-208, 217, 218, 220, 301, 309, 310, 311, 312, 313, 314, 316, 317, 318, 319, 330, 331, 336, 365, 224, 321, 325, 326, 328, 329, 368, 391-392, 394, 395, 396, 397, 398, 495, 498.

#### FIELD I. BIBLICAL STUDIES

201-202. FIRST HEBREW.—The principles and structure of the Hebrew language with translation of selected Old Testament narratives. 6 s.h.

PROFESSOR STINESPRING

205-206. ARABIC.—Introduction to the classical language and literature with some attention to the modern idiom. Hours to be arranged. 6 s.h.

PROFESSOR STINESPRING

207-208. SECOND HEBREW.—Samuel or Kings the first semester and Isaiah the second. 6 s.h.

ASSISTANT PROFESSOR BROWNLEE

217. THE NEW TESTAMENT IN GREEK.—Extensive reading of the Greek text of the New Testament, with special emphasis upon its interpretation. 3 s.h.

PROFESSOR CLARK

218. GALATIANS AND I CORINTHIANS.—A detailed study of two of Paul's major epistles, based on the Greek text. 3 s.h.

PROFESSOR CLARK

220. I PETER AND THE GOSPEL OF JOHN.—A detailed study of two of the non-Pauline writings of the New Testament. The course will be based on the Greek text. Prerequisite: 6 s.h. study of the Greek language. 3 s.h.

PROFESSOR DAVIES

301. THE RELIGIOUS THOUGHT OF POST-EXILIC JUDAISM.—A study of the development of religious ideas in Post-Exilic Judaism. 3 s.h.

ASSISTANT PROFESSOR BROWNLEE

304. ARAMAIC.—A study of the Aramaic portions of the Old Testament, and selected passages from the Targums, Midrashes, and Talmuds. Hours to be arranged. 3 s.h.

PROFESSOR STINESPRING

305. THIRD HEBREW.—A study of late Hebrew prose, with readings from Chronicles, Ecclesiastes, and the Mishnah. Hours to be arranged. 3 s.h.

PROFESSOR STINESPRING

307. SYRIAC.—A study of the script and grammar, with readings from the Syriac New Testament and other early Christian documents. Some knowledge of Hebrew and Aramaic prerequisite. 3 s.h.

PROFESSOR STINESPRING

309. HISTORY OF THE ANCIENT NEAR EAST.—A specialized study of the civilizations of Egypt, Palestine, Syria, and Mesopotamia in light of Biblical archaeology. 3 s.h.

PROFESSOR STINESPRING

310. OLD TESTAMENT PROPHECY.—The prophetic movement in Israel with special emphasis on the prophets of the eighth century B.C. 3 s.h.

PROFESSOR STINESPRING

311. THE LIFE AND TEACHINGS OF JESUS.—Prerequisite: New Testament 213-214. 3 s.h.

PROFESSOR CLARK

312. NEW TESTAMENT THEOLOGY.—An examination of the central aspects of New Testament theology. 3 s.h.

PROFESSOR DAVIES

313. THE APOSTOLIC FATHERS.—A study of the Christian development from Clement of Rome to Polycarp, with readings of the Greek text. 3 s.h.

PROFESSOR CLARK

314. PATRISTIC THOUGHT.—A study of the development of early Christian doctrine to the period of Irenaeus. 3 s.h.

PROFESSOR DAVIES

316. HELLENISTIC RELIGIONS AT THE BEGINNING OF THE CHRISTIAN ERA.—A study of the Gentile religions in the Roman Empire, at the beginning of the Christian era. 3 s.h.

PROFESSOR CLARK

317. THE SYNOPTIC GOSPELS.—A detailed study of their characteristics and contents, based upon the Greek text, with attention to their respective sources and to the development of synoptic criticism. Prerequisite: a basic "Introduction" to the New Testament. 3 s.h.

PROFESSOR CLARK

318. TEXT OF NEW TESTAMENT.—A study of the materials for the reconstruction of the text, the principles of textual criticism, and the history of the text. Practical exercises in the use of manuscripts and facsimiles will be given. 3 s.h.

PROFESSOR CLARK

319. PAUL AND RABBINIC JUDAISM.—A special study of the relation of Judaism and early Christianity. 3 s.h. PROFESSOR DAVIES

## RELATED COURSES IN OTHER DEPARTMENTS

Greek 257; Latin 258; Aesthetics, Art, and Music 215, 216.

## FIELD II. STUDIES IN CHURCH HISTORY

330. THE CHURCH IN EUROPE SINCE 1800.—Emphasis is placed on the relation of the Church to the social, economic, and political life of Modern Europe. 3 s.h. PROFESSOR PETRY

331. THE SOCIAL MESSAGE OF THE EARLY AND MEDIEVAL CHURCH.—A study of the social teachings and contributions of the Christian Church prior to the Protestant Reformation. 3 s.h. PROFESSOR PETRY

332. THE MEDIEVAL CHURCH.—Outstanding characteristics of the Medieval Church, emphasizing theory, polity, institutions, sacraments, and worship. 3 s.h. PROFESSOR PETRY

334. CHURCH REFORMERS AND CHRISTIAN UNITY.—The work of such reformers as Marsilius of Padua, William of Ockham, John Gerson, Pierre d'Ailly, and Nicholas of Cusa in relation to ecclesiastical schism and the search for Christian unity through representative councils. 3 s.h. PROFESSOR PETRY

336. HISTORY OF CHRISTIAN RENUNCIATION IN THE MIDDLE AGES.—A study of the renunciatory ideal and spiritual practices with special reference to Benedictines, Franciscans, Lowland Mystics, and leading seculars. 3 s.h. PROFESSOR PETRY

365. HISTORY OF RELIGIOUS EDUCATION IN MODERN TIMES.—A critical study of the historical movements in religious education since the Reformation with special consideration of the American development. 3. s.h. PROFESSOR SPENCE

## RELATED COURSES IN OTHER DEPARTMENTS

History 221-222, 225-226.

## FIELD III. STUDIES IN CHRISTIAN THOUGHT

224. CONCEPTIONS OF MAN IN WESTERN THOUGHT.—An analysis and interpretation of important types of philosophical and theological theory concerning man with a view to critical evaluation and construction. Prerequisite: 3 s.h. in Christian Doctrine or 6 s.h. in Philosophy. 3 s.h. PROFESSOR CUSHMAN

321. PLATONISM AND CHRISTIANITY.—An analysis of Plato's religious philosophy and a survey of its continuing influence in Hellenistic and Christian thought. Prerequisite: 6 s.h. in philosophy or its equivalent. 3 s.h. PROFESSOR CUSHMAN

322. THEOLOGY AND PHILOSOPHY IN THE NINETEENTH CENTURY.—A study of Protestant thought from Schleiermacher to Troeltsch together with representative theologians of Britain, with special attention to the reciprocal relations between theology and metaphysics. 3 s.h. PROFESSOR CUSHMAN

325. PHILOSOPHICAL THEOLOGY I.—Analysis and critique of dominant types of contemporary world-views for the formulation of the problem of philosophical theology. Main problems in the history of philosophical theology. 3 s.h. PROFESSOR CUSHMAN

326. PHILOSOPHICAL THEOLOGY II.—Historical and constructive approach to the problem of faith and reason, God and evil. 3 s.h. PROFESSOR CUSHMAN

328. SEMINAR IN 20TH CENTURY CONTINENTAL AND BRITISH THEOLOGY.—Critical examination of the thought of Barth, Brunner, Berdyaev, Maritan, F. R. Tennant, and William Temple. 3 s.h. PROFESSOR CUSHMAN

329. SEMINAR IN HISTORICAL THEOLOGY.—Selected problems in the history of Christian thought, with special reference to the relation between theology and philosophy. 2 s.h.



368. THEORIES OF RELIGIOUS EDUCATION.—A critical investigation of current theories of Religious Education. 3 s.h. PROFESSOR SPENCE

391-392. HISTORICAL TYPES OF CHRISTIAN ETHICS.—A critical study of representative documents of Christian ethical theory. 6 s.h. ASSOCIATE PROFESSOR BEACH

394. CHRISTIANITY AND THE STATE.—The relation of the Christian theory of the State to political problems, with special consideration of the religious assumptions underlying democratic theory and practice. 3 s.h. ASSOCIATE PROFESSOR BEACH

395. RELIGIOUS THOUGHT IN COLONIAL AMERICA.—Consideration of the principal types of Protestant thought in colonial culture. 3 s.h. PROFESSOR SMITH

396. AMERICAN RELIGIOUS THOUGHT IN THE NINETEENTH CENTURY.—Comparative exposition of Orthodoxy and Liberalism. 3 s.h. PROFESSOR SMITH

397. CURRENT AMERICAN THEOLOGY.—Critical appraisal of conflicting tendencies in American theological thought. 3 s.h. PROFESSOR SMITH

398. MODERN AMERICAN CHRISTOLOGY.—An analysis of the historical development of modern American conceptions of the person and work of Christ. 3 s.h. PROFESSOR SMITH

495. SEMINAR: JONATHAN EDWARDS AND JOHN WESLEY.—A comparative study of the major theological works of Edwards and Wesley. 2 s.h. PROFESSOR SMITH

498. SEMINAR: REINHOLD NIEBUHR AND PAUL TILLICH.—An analysis and appraisal of the theological thought of Niebuhr and Tillich. 2 s.h. PROFESSOR SMITH

#### RELATED COURSES IN OTHER DEPARTMENTS

Political Science 229, 231.

#### OTHER COURSES

Certain other courses listed in this bulletin and the *Bulletin of the Divinity School* may be taken for graduate credit provided that at the time of registration they are approved by the Director of Graduate Studies in Religion and by the Dean of the Graduate School.

## ROMANCE LANGUAGES

PROFESSOR JORDAN, CHAIRMAN AND DIRECTOR OF GRADUATE STUDIES—214 CARR;

PROFESSORS COWPER, FREDMORE, AND WALTON; ASSOCIATE

PROFESSORS CASTELLANO AND DAVIS

The Department of Romance Languages offers graduate work leading to the A.M. and Ph.D. degrees. In order to undertake graduate study in this Department, the student should normally have credit for four years of college courses in the chosen language, or 18 semester hours beyond the conventional two units offered at entrance to college. In addition to this minimum requirement, the student should have had one semester of composition and grammar review.

It is recommended that candidates for the A.M. degree take a second Romance Language as the minor subject.

A candidate for the Ph.D. degree should be equipped to follow graduate courses in a second Romance Language. For this degree some training in Romance Linguistics will be required, the amount to be determined by the Department upon consideration of the student's preparation in the field.

Graduate students in this Department will be required to maintain oral practice in their major language through non-credit exercises provided by the Department.



For 1951-52 the courses planned during the first semester are: French 213, 219, 323; Spanish 260, 265, 275; and during the second semester, French 214, 220, 324; Spanish 257, 266, 276.

## FRENCH

## FOR SENIORS AND GRADUATES

213. FRENCH CLASSICISM.—Its initial phase. Readings from Malherbe, Corneille, Molière, Racine, Pascal, Boileau, La Fontaine, La Rochefoucauld, Madame de Sévigné, La Bruyère, and others. 3 s.h. PROFESSOR WALTON

214. FRENCH CLASSICISM.—Its final phase. Readings from Fontenelle, Saint-Simon, Abbé Prévost, Marivaux, Lesage, Montesquieu, Voltaire, and others. Main emphasis on Voltaire. 3 s.h. PROFESSOR WALTON

215-216. THE MODERN FRENCH NOVEL.—A survey of the novel form from the seventeenth to the twentieth century, with particular attention to the analysis of fundamental literary trends: classicism, rationalism, romanticism, and realism. 6 s.h. PROFESSOR JORDAN

219. OLD FRENCH.—An introduction to the Old French language and literature. The *Chanson de Roland* and *Aucassin et Nicolette*. 3 s.h.

PROFESSOR COWPER

220. OLD FRENCH.—Types of Old French literature. The *lais* of Marie de France, Chrétien de Troyes and the Arthurian Romance, the *roman d'aventure*, the *Roman de la rose*, and the *Roman de Renard*. Readings and lectures. 3 s.h.

PROFESSOR COWPER

227. FRENCH POETRY SINCE THÉOPHILE GAUTIER.—Readings from the principal figures of the Parnassian and Symbolist movements, including Baudelaire, Leconte de Lisle, Heredia, Verlaine, Rimbaud, Mallarmé, and Régulier. 3 s.h.

PROFESSOR WALTON

232. ROUSSEAU AND THE BEGINNINGS OF ROMANTICISM.—A study of the sources of the French Romantic Movement in the works of J.-J. Rousseau and his successors, Bernardin de Saint-Pierre, Senancour, Chateaubriand, and others. 3 s.h.

PROFESSOR COWPER

238. ANATOLE FRANCE.—Analysis of the principal phases of his work and its relation to the French tradition. Reading of his poetry, *Le Crime de Sylvestre Bonnard*, *Thaïs*, *Le Jardin d'Épicure*, *Les Dieux ont soif*, *Le Lys Rouge*, *L'Île des Pingouins*, parts of *La Vie Littéraire*. Optional individual projects. 3 s.h.

PROFESSOR WALTON

## FOR GRADUATES

317. HISTORY OF THE FRENCH LANGUAGE.—A study of the development of the French language from Vulgar Latin, through Old and Middle French to Modern French, with an introduction to the phonology and morphology of the language. 3 s.h.

PROFESSOR COWPER

323-324. REALISM AND NATURALISM.—Literary doctrines and practices in the generation of 1850-90, with particular reference to the background of scientific thinking. 6 s.h.

PROFESSOR JORDAN

325-326. FRENCH LITERATURE IN THE SIXTEENTH CENTURY.—Main attention is given to Rabelais, Montaigne, Marot, Ronsard, Du Bellay. Principal movements treated are: Humanism, Hellenism, Platonism, Petrarchism, the *Pléiade*. 6 s.h.

PROFESSOR WALTON

331. DIDEROT AND THE ENCYCLOPÉDIE.—A study of the development of modern ideas and institutions in the group who surrounded Diderot in editing the *Encyclopédie*. 3 s.h.

PROFESSOR COWPER

333-334. CONTEMPORARY FRENCH LITERATURE.—The twentieth century is examined mainly with reference to the originality of its contribution in the domain of ideas and literary forms. Only the leading figures are read extensively: Rolland, Gide, Proust, Duhamel, Valéry. 6 s.h.

PROFESSOR JORDAN

350. NINETEENTH-CENTURY FRENCH CRITICISM.—A survey of critical doctrines and practices from Sainte-Beuve to the end of the century, including Brunetière, Faguet, Lemaître, France, Doumic and others. 3 s.h.

PROFESSOR JORDAN

### SPANISH

FOR SENIORS AND GRADUATES

257. OLD SPANISH LANGUAGE.—The historical development of the language together with illustrative readings. 3 s.h.

ASSOCIATE PROFESSOR DAVIS

258. OLD SPANISH LITERATURE.—The literature of the Middle Ages and Early Renaissance. 3 s.h.

ASSOCIATE PROFESSOR DAVIS

260. ADVANCED COMPOSITION AND SYNTAX.—Study of fundamental difficulties in the language; practice in writing idiomatic Spanish; exercises in free composition. For students who have a satisfactory command of Spanish grammar and fair conversational ability. Prerequisite: Spanish 173-174 or permission. 3 s.h.

ASSOCIATE PROFESSOR CASTELLANO

261-262. MODERN SPANISH NOVEL.—The evolution of the novel from the *costumbrista* writers through the generation of 1898. 6 s.h.

264. MODERN AND CONTEMPORARY SPANISH THEATER.—A brief review of the modern and contemporary Spanish Theater from the period of Romanticism. Lectures, reading and discussion of the most representative works of Benavente, Martínez Sierra, los hermanos Quintero, etc. 3 s.h.

ASSOCIATE PROFESSOR CASTELLANO

265. GOLDEN AGE LITERATURE: CERVANTES.—The life and thought of Cervantes, with special emphasis on his *Quijote*. 3 s.h.

PROFESSOR PREDMORE

266. GOLDEN AGE LITERATURE: THE DRAMA.—Study of the chief Spanish dramatists of the seventeenth century with readings of representative plays of this period. 3 s.h.

ASSOCIATE PROFESSOR CASTELLANO

275. CONTEMPORARY SPANISH LITERATURE.—Essay and Lyric Poetry. A study of the revision of national values and literary expression in the twentieth century with particular reference to the crisis of 1898 and to the enrichment of the Spanish tradition through extra-peninsular influences. 3 s.h.

PROFESSOR PREDMORE

276. CONTEMPORARY SPANISH LITERATURE.—Novel. A study of tradition and innovation in the twentieth century Spanish novel with emphasis on the novels of Unamuno, Baroja, Valle Inclán, and Pérez de Ayala.

PROFESSOR PREDMORE

### SOCIOLOGY AND ANTHROPOLOGY

PROFESSOR JENSEN, CHAIRMAN—215E SOCIAL SCIENCE BUILDING; PROFESSOR HART, DIRECTOR OF GRADUATE STUDIES—215D SOCIAL SCIENCE BUILDING; PROFESSOR THOMPSON; ASSOCIATE PROFESSORS LABARRE AND SCHETTLER

The Department of Sociology and Anthropology offers graduate work leading to the A.M. and Ph.D. degrees. Before undertaking advanced work in this department, a student must have completed a minimum of twelve semester hours of approved preliminary courses in the field, and twelve additional semester hours in the field or in related work. A student who is deficient in the minimum required work will be asked to take additional undergraduate courses agreed upon in conference with the Director of Graduate Studies.

Candidates for advanced degrees in Sociology usually take minor work in Psychology, Economics, Political Science, Education, History, or Religion. Detailed requirements for the minor work, and for majors in other departments who wish to present Sociology as minor work, may be obtained from the Director of Graduate Studies.

The courses planned for 1951-52 are 211, 212, 213, 214, 233, 235, 237, 238, 243, 246, 251, 271, 273, 276, 286, 292, 330, 340, 380, 382, 391.

ANTHROPOLOGY

211. PEOPLES OF THE WORLD.—A comparative study of cultures the world over, including marriage, religion, economics, social and political organization, art and music, with emphasis upon preliterate peoples. Prerequisite: course 91-92, 101, 111 or 112. 3 s.h.

ASSOCIATE PROFESSOR LABARRE

212. PRIMITIVE RELIGION.—The ethnography, the social functions and the socio-psychological meanings of religion in primitive societies. Prerequisite: course 91-92, 101, 111 or 112. 3 s.h.

ASSOCIATE PROFESSOR LABARRE

213. PERSONALITY AND SOCIETY.—The sociology and social psychology of human personality, its origins in the primary group, its nature and varieties, and its integrations into secondary group institutions. 3 s.h.

ASSOCIATE PROFESSOR LABARRE

(Admission only by consultation with the instructor.)

214. PERSONALITY AND CULTURE.—The influence of culture patterns and social institutions upon character structure, socialization of the individual, and the dynamics of human personality. Comparative anthropological materials will be drawn upon. Prerequisite: course 213. 3 s.h.

ASSOCIATE PROFESSOR LABARRE

330. SEMINAR IN ANTHROPOLOGY.—A seminar for advanced students who wish to pursue individual studies in racial or cultural anthropology. 1 to 3 s.h. *each semester.*

ASSOCIATE PROFESSOR LABARRE

COMMUNITY, RACE AND CULTURE

(Either 91-92, 101, 111 or 112 prerequisite for all courses.)

233. RURAL SOCIOLOGY.—The sociology of the land; peasant and folk societies and cultures; patterns of rural settlement like the farm, the plantation, the ranch and others; rural personality types; the changing character of rural life; rural problems. 3 s.h. Second semester.

PROFESSOR THOMPSON

235. URBAN SOCIOLOGY.—A study of the city and civilization, the newspaper, the social survey, the slum and housing, neighborhoods and natural areas, urban institutions, urban problems, and city planning. 3 s.h.

[Offered in Summer Session, 1951]

PROFESSOR THOMPSON

237. COMMUNITY AND SOCIETY.—This course seeks to provide a frame of reference for the analysis and ordering of facts pertaining to the diverse cultures of the world, the State, the world community, the Great Society, news, mass behavior, social problems, races and classes. 3 s.h.

PROFESSOR THOMPSON

238. RACE AND CULTURE.—A study of the nature of race and the relationships and problems of race. 3 s.h.

PROFESSOR THOMPSON

[Offered in Summer Session, 1951]

340. SEMINAR.—Methodological problems involved in the study of race relations, urban and rural life, the South and society generally. 3 s.h. *first semester.*

PROFESSOR THOMPSON

COLLECTIVE BEHAVIOR

243. SOCIAL ATTITUDES AND COLLECTIVE BEHAVIOR.—Study of attitudes as products of social interaction; organization of attitudes into personal behavior patterns; expression of social attitudes in social, political and industrial groups; social unrest and the behavior of crowds and mobs; analysis of social movements, strikes, revolutions, and other group organizations. Prerequisite: course 91-92, 101, or 111 or 112. 3 s.h.

ASSOCIATE PROFESSOR SCHETTLE

246. PUBLIC OPINION AND PROPAGANDA.—Nature and development of public opinion; relation to attitudes, biases, stereotypes and controversial issues; role of leaders, pressure groups and minority groups; use of radio, press, motion picture and graphic arts; propaganda and censorship; measurements of public opinion. Prerequisite: course 91-92, 101, or 111 or 112. 3 s.h.

ASSOCIATE PROFESSOR SCHETTLE

249. CHILD WELFARE.—A study in heredity and environment as factors in personality development; infant conservation; welfare responsibilities of the school, emphasizing the physical and mental well-being of the child, play, and compulsory and industrial education; child labor, diagnosis and treatment of delinquency; care of the dependent and neglected child; child-caring agencies, public and private; and a community program of child welfare. Prerequisite: course 91-92, 101, 111 or 112. 3 s.h.

PROFESSOR JENSEN

250. MARRIAGE AND THE FAMILY.—An analysis of contemporary marriage and family experience with emphasis on its functions, problems, resources and values. Not open to students who have received credit for Religion 170. Prerequisite: course 91-92, 101, 111 or 112. 3 s.h.

PROFESSOR HART

### SOCIAL ORGANIZATION AND DISORGANIZATION

271. SOCIAL PATHOLOGY.—A study of the causes, extent, significance, and constructive treatment of the principal forms of pathology in modern society; natural disasters, poverty, physical defectiveness, malnutrition, mental deficiency, mental disease, undirected leisure activities and unstandardized commercial recreation, alcoholism, prostitution, vagrancy, and delinquency. Prerequisite: course 91-92, 101, 111 or 112. 3 s.h.

PROFESSOR JENSEN

273. SPECIAL PROBLEMS IN SOCIAL PATHOLOGY.—Research projects in social and personal disorganization, limited to advanced students with the approval of the instructor. 1 to 3 s.h. *each semester*.

PROFESSOR JENSEN

276. CRIMINOLOGY.—A study of the original tendencies of man and the problem of socializing these tendencies; the relation of physical and mental defectiveness and untoward influence in the home and neighborhood to crime; the development of criminological theory and procedure, emphasizing penal and reform methods, and especially modern methods of social treatment and prevention of crime. Prerequisite: course 91-92, 101, 111 or 112. 3 s.h.

PROFESSOR JENSEN

377. SEMINAR IN MEDICAL SOCIOLOGY.—The basic principles of the various medical specialties as applied to the problems of marriage and the family. Open only to graduate students in sociology, with the consent of the instructor and of the Director of Graduate Studies. Given by the Staff of the Medical School under the direction of Dr. Bayard Carter, M.D. 2 s.h.

378. SEMINAR IN FAMILY LAW.—A seminar approach to the efforts of the social sciences, including law, to deal with the intricate and perplexing problems of the modern family. Readings are assigned in legal and sociological material. 2 s.h.

PROFESSOR BRADWAY

380. SEMINAR IN APPLIED SOCIOLOGY.—Special research problems in social pathology, child welfare, criminology, and related topics. 1 to 3 s.h. *each semester*.

PROFESSOR JENSEN

### SOCIAL THEORY

286. SOCIAL ETHICS.—A study of sociological fundamentals underlying ethics, including the controversy between materialistic and idealistic social thinkers, the nature of personalities and of social organization, the nature of social values, types of social interaction and their effects upon general social values, underlying principles and facts of social change, and the bearings of all these upon certain social problems. Prerequisite: course 91-92, 101, or 111 or 112. 3 s.h.

PROFESSOR HART

288. CONTEMPORARY PROBLEMS IN CULTURAL LAG.—An exploration of such sociological problems as social evolution, cultural lag, conflict, accommodation, leadership, and social reform, in relation to the crisis of civilization precipitated by the development of the atomic bomb and by kindred discoveries and inventions. Prerequisite: course 91-92, 101, or 111 or 112. 3 s.h.

PROFESSOR HART

381. PRINCIPLES OF SOCIOLOGY.—A critical study of sociological theory. The sociological theories of recent writers will be critically examined with a view to laying the foundation for a constructive theory of the social life in modern biology and psychology. Discussions and papers by the class. 3 s.h.

PROFESSOR JENSEN



382. HISTORY OF SOCIOLOGICAL THEORY.—Lectures on the development of social thought from Aristotle to the present; the social philosophies of Plato, Aristotle, St. Augustine, Thomas Aquinas, Machiavelli, Bodin, Hobbes, Locke, Vico, Montesquieu, Rousseau, Condorcet, and the sociological systems of Conte, Spencer, Schäffle, Lillienfeldt, Gumpłowicz, Ratzenhofer, and Ward will, among others, be considered. A large amount of assigned reading will be required in this course. The student is advised to correlate this course with related courses in economics, history, political science, and philosophy. 3 s.h. PROFESSOR JENSEN

#### METHODS OF SOCIAL RESEARCH

292. STATISTICAL TECHNIQUES IN SOCIOLOGY.—Intended for graduate students, and for undergraduates who are ready to undertake original statistical research projects. Prerequisite: course 91-92, 101, 111 or 112. 3 s.h.

PROFESSOR HART

293-294. SPECIAL PROBLEMS IN SOCIAL STATISTICS.—Applications of statistical techniques to specific research topics; limited to advanced students with permission of the instructor. 1 to 3 s.h. *each semester*.

PROFESSOR HART

391. SEMINAR IN SOCIAL STATISTICS.—Special research problems in social statistics, social ethics, the family or related topics. 1 to 3 s.h. *each semester*

PROFESSOR HART

396. METHODS OF SOCIAL RESEARCH.—A critical appraisal of the various methods of research and investigation that can be applied to the study of sociological phenomena. 3 s.h.

PROFESSOR JENSEN

393. OPERATIONAL SOCIOLOGY.—A seminar for advanced students, presenting an operational philosophy of social science as a basis for research in sociology. Examples of operational procedure will be analyzed. Assigned projects will embody applications of the operational method. Prerequisite: one of the following: Sociology 291 or Economics 237-238, or Education 209, or Mathematics 124, or some other acceptable course in statistics. 3 s.h.

PROFESSOR HART

399. DEPARTMENTAL SEMINAR.—Research work upon special problems in sociology and anthropology. 1 s.h. *each semester*.

PROFESSORS JENSEN, HART, AND THOMPSON; ASSOCIATE  
PROFESSORS SCHETTLER AND LABARRE

#### RELATED COURSES IN OTHER DEPARTMENTS

Economics 215, 216, 217; Philosophy 205; Political Science 223, 224; Psychology 206.

## ZOOLOGY

PROFESSOR GRAY, CHAIRMAN—218 BIOLOGY BUILDING; PROFESSOR WILBUR, DIRECTOR OF GRADUATE STUDIES—328 BIOLOGY BUILDING; PROFESSOR EMERITUS PEARSE; PROFESSOR HARGITT; ASSOCIATE PROFESSORS BOOKHOUT, HUNTER, AND WHARTON; ASSISTANT PROFESSOR HORN

To undertake study toward an advanced degree in zoology a student should have completed an undergraduate major in zoology or its equivalent. This normally amounts to twenty-four or more hours of course work distributed among various fields of zoology, and must include comparative vertebrate anatomy or vertebrate zoology, embryology, and physiology. At least a year of chemistry is required. Physics is recommended. Candidates for the doctorate will be expected to have had not less than two years of chemistry and a year of botany. For some phases of zoology, organic chemistry is essential.

Required work for the A.M. ordinarily includes 18 semester hours of advanced course work in zoology, six semester hours of course work in a minor department, and an acceptable thesis.

Candidates for the Ph.D. degree are expected to be broadly-trained zoologists. The program of each candidate is determined by a committee which reviews previous training and sets specific requirements to be met. Normally the program



includes one or more graduate courses in each of several fields of zoology; courses in a minor subject; wide reading in science in general and in biology in particular; research; and a dissertation based on original work. A first draft of the thesis must be submitted to the major professor by March 15 of the year in which the degree is to be conferred.

For 1951-52 the courses planned are 204, 224, 238, 271, 274, 303, 351-352, 353-354, 355-356.

#### FOR SENIORS AND GRADUATES

202. **HELMINTHOLOGY.**—Classification, morphology and host relations of parasitic worms. Lectures, readings, reports and laboratory work. Prerequisite: Zoology 161. 4 s.h. ASSOCIATE PROFESSOR HUNTER

204. **ADVANCED PARASITOLOGY.**—Lectures, conferences, readings, and laboratory work dealing with practical and theoretical matters relating to animal parasites. Prerequisite: Zoology 161. 4 s.h. ASSOCIATE PROFESSOR WHARTON

222. **ENTOMOLOGY.**—Anatomy, physiology, embryology, and classification of insects. Prerequisite: one year of zoology. 4 s.h. PROFESSOR GRAY

224. **VERTEBRATE ZOOLOGY.**—A study of the life histories, adaptations, ecology, and classification of vertebrate animals. Prerequisite: Zoology 53. 4 s.h. PROFESSOR GRAY

229. **ENDOCRINOLOGY.**—The structure, physiology, and embryology of the endocrine glands. Lectures, reading assignments, reports, and laboratory work. Prerequisites: Zoology 53, 92, and 171. 4 s.h.

238. **SYSTEMATIC ZOOLOGY.**—The fundamental theory and practice involved in the collection, identification and classification of animals. Prerequisites: Zoology 1 and 2. 4 s.h. ASSOCIATE PROFESSOR WHARTON

253. **ADVANCED VERTEBRATE MORPHOLOGY.**—Lectures, reports and reading assignments in the comparative morphology of the vertebrates, with particular emphasis on theories concerning the interrelationships of vertebrates, and the origin of certain vertebrate structures. Advanced laboratory study in selected groups of vertebrates. Prerequisites: Zoology 53, 92. 4 s.h.

ASSISTANT PROFESSOR HORN

271. **GENERAL PHYSIOLOGY.**—The physiological processes of living matter approached through studies of cells. Prerequisites: two years of biology and at least one year of chemistry. 4 s.h. (w) PROFESSOR WILBUR

274. **INVERTEBRATE ZOOLOGY.**—A study of structure, functions, and habits of invertebrate animals under normal and experimental conditions. Field trips will be made to study, collect, and classify animals in their natural habitats. Prerequisites: Zoology 1 and 2. 4 s.h. ASSOCIATE PROFESSOR BOOKHOUT

276. **PROTOZOOLOGY.**—The morphology, physiology, taxonomy, and culture of protozoa. Prerequisites: Zoology 1 and 2. 4 s.h.

ASSOCIATE PROFESSOR BOOKHOUT

278. **INVERTEBRATE EMBRYOLOGY.**—Lectures, readings and laboratory work dealing with rearing, development and life history of invertebrates. Prerequisite: Zoology 92. 4 s.h. ASSOCIATE PROFESSOR BOOKHOUT

#### FOR GRADUATES

303. **ECOLOGY.**—Relation of animals to environment. Lectures, readings, reports, conferences; laboratory and field work. 4 s.h. PROFESSOR GRAY

306. **ADVANCED ECOLOGY.**—Lectures, conferences, field work, and methods. Prerequisite: Zoology 303. 4 s.h.

307. **FOUNDATIONS OF ZOOLOGY.**—Lectures, readings, and discussions on the background and training essential for a professional zoologist. 2 s.h.

324. **ADVANCED PHYSIOLOGY.**—Recent advances in Physiology. Lectures, conferences and laboratory work. Prerequisite: Zoology 271. 4 s.h.

PROFESSOR WILBUR

328. EXPERIMENTAL EMBRYOLOGY.—Lectures, readings, reports and laboratory work. Prerequisites: Zoology 53, 92, 156, 271, or equivalent. 4 s.h.

341. HISTORICAL ZOOLOGY.—Readings and discussions. A critical study of the developments of modern biological concepts and theories, their past and present significance. 2 s.h.  
PROFESSOR HARGITT

343. CYTOLOGY.—The structure of the cell. Lectures, readings, reports, and laboratory work. Prerequisites: Zoology 53, 92, 156, or equivalent. 4 s.h.  
PROFESSOR HARGITT

351-352. ZOOLOGICAL JOURNAL CLUB.—A weekly meeting of graduate students and Faculty to hear reports and to discuss biological facts, theories, and problems. One hour a week throughout the year. Required of all graduate students who major in zoology. 2 s.h.  
STAFF

353-354. RESEARCH.—Students who have had proper training may carry on research under direction of members of the Staff in the following fields. Hours and credits to be arranged.

(a) EMBRYOLOGY.

(b) PHYSIOLOGY.

PROFESSOR WILBUR

(c) HISTOLOGY, CYTOLOGY.

PROFESSOR HARGITT

(d) INVERTEBRATE ZOOLOGY, INVERTEBRATE HISTOLOGY, AND EMBRYOLOGY.

ASSOCIATE PROFESSOR BOOKHOUT

(e) ECOLOGY.

PROFESSOR GRAY

(f) ENTOMOLOGY, VERTEBRATE ZOOLOGY.

PROFESSOR GRAY

(g) VERTEBRATE MORPHOLOGY AND MORPHOGENESIS.

ASSISTANT PROFESSOR HORN

(h) PARASITOLOGY.

ASSOCIATE PROFESSOR HUNTER

(i) PARASITOLOGY.

ASSOCIATE PROFESSOR WHARTON

355-356. SEMINAR.—Special seminar courses in particular fields are given by various members of the Staff when the number of students makes them desirable. These will be in the fields indicated under courses 353-354 above. 2 s.h.

## COURSES IN THE MEDICAL SCHOOL OPEN TO GRADUATE STUDENTS

PROFESSORS BEARD, F. BERNHEIM, CONANT, EADIE, EVERETT, HALL, HANDLER, HETTINGTON, MARKEE, SAWYER, D. T. SMITH, AND TAYLOR; ASSOCIATE PROFESSORS M.L.C. BERNHEIM, DUKE, MCCREA, PEELE, AND TAYLOR; ASSISTANT PROFESSORS SCHWERT AND RUNDLES

The facilities of the several Departments of the Medical School listed below are available to qualified graduate students, already admitted to the Graduate School, for independent or supervised research and investigations, whether or not they are working toward advanced degrees.

Graduate students wishing to pursue a major or minor in any of the following departments, or to enroll in any of the courses listed below, should consult or write the appropriate Director of Graduate Studies: Anatomy, Dr. J. E. Markee; Microbiology, including Mycology, Parasitology and Hematology, Dr. D. T. Smith; Biochemistry and Nutrition, Dr. Philip Handler; Physiology and Pharmacology, Dr. F. G. Hall.

Because of the special schedules maintained in the Medical School, graduate students should write the Director of Graduate Studies in which they are interested to ascertain the precise dates when courses are offered.

### ANATOMY

Completion of training equivalent to that required of an undergraduate majoring in biology is prerequisite for these courses in human anatomy.

**M201. GROSS HUMAN ANATOMY.**—A course especially designed for graduate students, comprising a complete dissection of the cadaver. The laboratory work is supplemented by conferences which place emphasis on the biological aspects of the subject. Oct.-Feb. Hours and credits (maximum 8 s.h.) by arrangement. Prerequisite: adequate training in comparative anatomy and embryology.

DR. MARKEE AND STAFF

**M202. MICROSCOPIC ANATOMY.**—Conferences and laboratory work on the morphological characteristics of the tissues of the animal body. The work is based upon a study of fresh and prepared material and is approached from the physiological viewpoint. Oct.-Feb. Hours and credits (maximum 3 s.h.) by arrangement. Prerequisite: adequate training in histology or cytology.

DR. MARKEE AND STAFF

**M203. ANATOMY OF THE NERVOUS SYSTEM.**—A study of the gross and microscopic structure of the human central nervous system, special attention being paid to the structural and functional relationships between the various nuclei and fiber tracts. Oct.-Feb. Hours and credits (maximum 4 s.h.) by arrangement. Prerequisite: Anatomy M201.

DR. MARKEE AND STAFF

**M204. NEUROANATOMICAL BASIS OF BEHAVIOR.**—A study of the gross and microscopic anatomy of the nervous system with emphasis on the structural and functional relationships between tracts, nuclei, and cortical areas. In so far as possible the result of deficit in a system or systems will be demonstrated by motion picture aids and the mechanisms involved will be reviewed and discussed. Restricted to graduate students with the equivalent of a major in Psychology. 3 s.h.

DR. HETHERINGTON

## BIOCHEMISTRY AND NUTRITION

The program of graduate studies in biochemistry is designed primarily for Ph.D. candidates who intend to pursue a research career in this field. Candidates for the A.M. degree only are not encouraged to apply for admission and are accepted only under exceptional conditions. Preference is given to students who have completed one year of graduate work in chemistry, physics, or biology at Duke University or at some other approved institution. As preparation for courses in advanced chemistry, the student must have completed college courses in analytical geometry and elementary calculus. He also must have had adequate preparation for the reading examination in French and German, which is required of candidates for the Ph.D. degree.

**M241. GENERAL BIOCHEMISTRY AND NUTRITION.**—Three lectures, four laboratory periods of three hours each, one two-hour seminar weekly for eighteen weeks. Prerequisites: general chemistry, organic chemistry, physical and analytical chemistry, and at least one year of college biology. Feb.-June. 8 s.h.; without laboratory work 3 s.h.

DRS. HANDLER, TAYLOR, M. L. C. BERNHEIM,  
SCHWERT AND KAMIN

**M242. BIOCHEMICAL PREPARATIONS.**—Laboratory work with conferences when necessary. This course involves detailed study of the chemistry of enzymes, proteins, fats, carbohydrates and derivatives. Prerequisite: Biochemistry 241 or its equivalent. Hours by arrangement. 2, 3, or 4 s.h.

DRS. HANDLER, M. L. C. BERNHEIM, AND SCHWERT

**M341. THEORIES AND METHODS OF PHYSICAL BIOCHEMISTRY.**—A lecture and seminar course on basic physical concepts and experimental methods in the study of biological compounds and systems. With demonstrations. Given alternately with M343-344. 2 s.h.

DR. SCHWERT

**M343-344. BIOCHEMISTRY OF PROTEINS AND ENZYMES.**—A lecture and seminar course devoted to the chemical, physical and biological properties of proteins and enzymes. In the first semester, general aspects of protein chemistry will be considered, whereas in the second semester specific proteins and enzyme systems will be reviewed. Given alternately with M341. 4 s.h.

DR. SCHWERT

M345-346. Seminar required of all graduate students majoring in biochemistry, one hour per week. 2 s.h.  
 Drs. HANDLER, TAYLOR, SCHWERT, AND  
 M. L. C. BERNHEIM

M347-348. BIOCHEMICAL RESEARCH.—A laboratory course in which the students are introduced to specialized concepts and methods currently employed in biochemical research. This will be accomplished by rotating assignment of the students to the various special laboratories of the department. Prerequisite: Biochemistry M241 or its equivalent. 2, 3, or 4 s.h.

Drs. HANDLER, TAYLOR, SCHWERT, AND M. L. C. BERNHEIM

M349-350. INTERMEDIARY METABOLISM.—A seminar course devoted to a study of the detailed mechanisms of carbohydrate, fat and protein metabolism. Given alternately with Biochemistry M351-352. Prerequisite: Biochemistry M241 or its equivalent. 4 s.h.

DR. HANDLER

M351. NUTRITION.—A seminar course in which the chemical and physiological behavior of essential nutritional factors is considered, as well as the nature of deficiency states. Prerequisite: Biochemistry M241 or its equivalent. Given alternately with Biochemistry M349-350. 2 s.h.

DR. HANDLER

M354. BIOCHEMISTRY OF DISEASE.—A lecture and seminar course in the biochemical aspects of the pathogenesis, diagnosis, and therapy of diseases of metabolism. 2 s.h.

DR. HANDLER

### MICROBIOLOGY

M221. BACTERIOLOGY AND IMMUNOLOGY.—This course is devoted primarily to the study of the biological and immunological relationships of microorganisms (bacteria, fungi, Rickettsia and viruses) in disease. It is not a course in bacteriologic technique. An additional course in technical methods is provided for those who require it. Five lectures, two 1-hour conferences and three laboratory periods of 3 hours each weekly, in fall quarter. Prerequisites: courses in general zoology, general botany, histology and comparative anatomy, general and organic chemistry. 6 s.h.

DR. D. T. SMITH AND STAFF

M322. IMMUNOCHEMISTRY.—A seminar dealing with the fundamentals of immunological reactions in general and with the chemistry of antigen-antibody reactions in particular. 2 s.h.

M323. ADVANCED BACTERIOLOGY AND IMMUNOLOGY.—This course is intended primarily for graduate students majoring in bacteriology, but it is also available as a minor to such other graduate students in related fields, to whom it is recommended by respective supervising committees and with the approval of the Department of Bacteriology. Prerequisites: Bacteriology and Immunology, M221. 8 s.h.

DR. D. T. SMITH AND STAFF

M324. RESEARCH SEMINAR ON VIRUSES.—Limited to advanced students. 2 s.h. per semester.

DR. BEARD

M325. MEDICAL MYCOLOGY.—This course is intended to familiarize the graduate student, majoring in mycology, with the fungi causing disease in man and animals. The course includes practical laboratory work with materials from patients in Duke Hospital and that sent to the Duke Fungus Registry from outside sources. Prerequisites: A.M. in Botany with Major in Mycology and M221. Course limited to four students each year. 8 s.h.

DR. CONANT

### HEMATOLOGY

M211. Three lectures and three laboratory periods of 3 hours each, weekly, for eleven weeks in the spring quarter. Prerequisites: courses in general zoology, general botany, histology and comparative anatomy. 4 s.h.

DR. RUNDLES

### MEDICAL PARASITOLOGY

M291. MEDICAL PARASITOLOGY.—One lecture and one three-hour laboratory period per week for eleven weeks during the fall quarter. Prerequisites: courses in Zoology 204, general botany, histology and comparative anatomy. 1 s.h.



## PHYSIOLOGY AND PHARMACOLOGY

M261-262. HUMAN PHYSIOLOGY.—Six lectures and twenty laboratory hours per week. Prerequisites: Anatomy M201 and Biochemistry M241 (or equivalents) and at least one year of college physics. Feb.-June. Credits depending on work taken. (Maximum 8 s.h.)

M365. RESPIRATION AND AERO-PHYSIOLOGY.—A study of the fundamental respiratory processes in living organisms, and of the special physiological responses and adjustments of the individual during high altitude flight. Lectures, conferences, laboratory. Prerequisites: M261-2 or equivalent. 4 s.h. DR. HALL

M367. PHYSIOLOGY OF THE NERVOUS SYSTEM.—Presentation of the fundamental processes of nervous tissue and of the integration of these functions in man. Lectures, conferences, and laboratory. Prerequisites: M261-2 or equivalent. 2 s.h. DR. EADIE

M369. PHARMACOLOGY. MODE OF ACTION OF DRUGS.—Studies and discussions of the pharmacological action of drugs in terms of biochemical and physiological processes. Lectures, conferences, and laboratory. Prerequisites: M261-2 or equivalent. 4 s.h. DR. F. BERNHEIM

M370. SEMINAR.—A weekly meeting of graduate students and staff in which papers reviewing classical and current physiological literature are reported. Required of all graduate students who are candidates for A.M. or Ph.D. degree. 2 s.h. DR. EADIE, DR. HALL AND STAFF

M372. RESEARCH.—Individual investigations in the various fields of physiology. Credits to be arranged. STAFF

## ADVANCED DEGREES CONFERRED JUNE 5, 1950

## MASTER OF ARTS

Abbot, William Wright, III  
Alfriend, Genevieve Harrison  
Barry, Richard Schriver  
Bellamy, Virginia Nelle  
Benedict, Margaret Ann  
Bennett, William Leffis  
Bond, Jean Bernerd  
Bond, Sara McCallum  
Bonnen, James Thomas  
Bormann, Frederick Herbert  
Brownell, Robert Foote, Jr.  
Bullock, Thomas Kirby  
Bunn, Carolyn Cooper  
Caskey, Ann Jourdan  
Cato, Benjamin Ralph, Jr.  
Chait, Donald Carl  
Clavering, Rose  
Elliott, Don Ringgold  
Georgiade, Ruth Sauer  
Hollyday, Frederic B. M.  
Huckabee, Elizabeth Rezner  
Hughes, Margaret Elizabeth

Hunter, Sylvia Fishman  
Kenion, Alonzo Williams  
Krummel, Mary Eleanor  
Magner, Bertha Ardys  
Oliver, George Brown  
Parker, William Alonzo  
Peters, Frank Anthony  
Pichard, Howard Oscar  
Robertson, Patricia Ruth  
Rogers, Rembert A., Jr.  
Rosenthal, Louis  
Ruffin, Albert L., Jr.  
Schramm, Robert J., Jr.  
Sharp, Henry, Jr.  
Spearman, Eloise  
Spencer, William  
Spring, Marion Kathryn  
Stroud, Lowell  
Sulzer, Richard Lee  
Waller, William W., Jr.  
Warlick, George Clifton, Jr.  
Whitehead, Mary Elizabeth

## MASTER OF EDUCATION

Carter, Rodney Graham  
Charlton, Ruth Margaret  
Haralson, Robert Howell, Jr.  
Howerton, Dorothy Lansdell

Irwin, Harry Penrose, Jr.  
Power, Walter Dean, Jr.  
Thrift, Susie Webb  
Warren, Eva Woosley

## DOCTOR OF PHILOSOPHY

AGOURIDES, SAVAS CHRESTOS, Diploma, University of Athens.  
Dissertation: *A Study in the Origins of Christianity.*

BRAVERMAN, ELIZABETH PARKS, A.B., Grinnell College.

Dissertation: *Aspects of Imagery in the Poetry of Herbert, Vaughan, and Traherne: A Critique of Certain Definitions of "Metaphysical."*

BURKHALTER, JAMES HERBERT, A.B., Emory University; M.S., Georgia School of Technology.  
Dissertation: *The Microwave Spectrum of Oxygen.*

BURTT, EVERETT JOHNSON, JR., A.B., Berea College; A.M., Duke University.  
Dissertation: *An Economic Appraisal of the New England Fishing Industry.*



- BUSSELL, WILSIE FLORENCE, A.B., A.M., Duke University.  
Dissertation: *The Parallel Themes of Pacifism and Revolution in the Works of Romain Rolland 1914-1944.*
- DILLINGHAM, WILLIAM PYRLE, B.A.E., University of Florida; M.S., University of Tennessee.  
Dissertation: *Federal Aid to Veterans 1917 to 1941.*
- EDWARDS, HOWARD DAWSON, B.S., University of Georgia.  
Dissertation: *Microwave Spectra and Molecular Constants of Methyl Alcohol and Methyl Amine.*
- FERRELL, DOCTOR THOMAS, JR., B.S., Eastern Kentucky State Teachers College; A.M., Duke University.  
Dissertation: *The Mechanism of the Discharge of the Electrolytic Manganese Dioxide Electrode.*
- FULTON, LEWIS MCLEOD, JR., B.A., Mt. Allison University; A.M., Duke University.  
Dissertation: *Decompositions Induced Under Finite-to-One Closed Mappings.*
- GARRETT, JAMES RICHARD, B.S., Lenoir-Rhyne College; B.S. in Meteorology, California Institute of Technology; A.M., Duke University.  
Dissertation: *Normal Equations and Resolvents in Fields of Characteristic  $p$ .*
- GILLIAM, OTIS RANDOLPH, B.S., Randolph-Macon College.  
Dissertation: *Microwave Investigations of Methyl Fluoride, Fluoroform, and Phosphorus Trifluoride.*
- HATHORN, GUY BRAMLETT, B.A., M.A., University of Mississippi.  
Dissertation: *The Political Career of C. Bascom Stemp.*
- HAUPTSCHNEIN, MURRAY, B.S., College of the City of New York.  
Dissertation: *The Action of Fluorine and Chlorine on Deactivated Alkenes and Alkanes.*
- HELM, ROBERT MEREDITH, JR., A.B., Wake Forest College; A.M., Duke University.  
Dissertation: *A Critique of the Ethics of Philosophical Idealism.*
- HERTZ, HILDA, A.B., Skidmore College; A.M., Duke University.  
Dissertation: *Language and the Social Situation: A Study in Race Relations.*
- HORN, HERMAN L., A.B., Bridgewater College.  
Dissertation: *The Growth and Development of the Democratic Party in Virginia since 1890.*
- HOWARD, RAYDEEN ROLAND, B.S., University of Georgia; A.M., Duke University.  
Dissertation: *Pressure Broadening of Ammonia Lines by Polar and Non-Polar Foreign Gases.*
- HULL, WAYLAND E., A.B., Milton College.  
Dissertation: *A Study of Certain Factors Which Influence the Pattern of Breathing in the Anesthetized Dog.*
- HUMPHLETT, WILBERT JEPHTA, A.B., A.M., Clark University.  
Dissertation: *Reactions of Nitriles with Grignard and Other Basic Reagents and of Active Methyl Pyridyl Compounds with Ethyl Oxalate.*
- KENT, JOHN FRANKLIN, B.A., College of the Holy Cross; A.M., Columbia University.  
Dissertation: *The Application of Quantitative Methods in Studies of the Antigen-Antibody Reactions.*
- KNIGHT, WALTER DAVID, JR., A.B., Middlebury College; A.M., Duke University.  
Dissertation: *The Effect of Electronic Paramagnetism on Nuclear Magnetic Resonance Frequencies in Metals.*
- KNUDSEN, LYLE LEONARD, B.S., Morningside College.  
Dissertation: *The Relation Between Soil Properties and Growth of Slash Pine in the Coastal Plain Region of Southeastern United States.*
- LEWIS, HAROLD WALTER, B.S., Middlebury College; M.A., University of Buffalo.  
Dissertation: *Cosmic-Ray "Bursts" in Ionization Chambers of Different Materials.*
- METZ, LOUIS JOHN, B.S., Michigan State College; M.F., Duke University.  
Dissertation: *Relation Between Soil Properties and the Growth of Loblolly Pine in the Southeastern Coastal Plain.*
- MILLER, WILLIAM LONG, B.B.A., University of Chattanooga; A.M., Duke University.  
Dissertation: *Some Aspects of the Income Velocity of Money.*
- MOFFETT, ROBERT PREYER, B.S., A.M., Duke University.  
Dissertation: *A Study of the Kinetics of Some Aromatic Cyclodehydration Reactions.*
- MONTGOMERY, JOHN F., A.B., Hampden-Sydney College; A.M., University of Southern California.  
Dissertation: *An Investigation of the "Case II" Relationship in Arithmetic.*
- MONTGOMERY, THERON EARLE, JR., A.B., Wofford College; A.M., Duke University.  
Dissertation: *The Social Implications of the Personnel Policies of the Southern Cotton Textile Industry.*
- NEWBERRY, GENE WILSON, A.B., Denison University.  
Dissertation: *A Critical Study of the Philosophy of Samuel Taylor Coleridge, with Particular Reference to His Epistemology.*

- OGLESBY, ROSCOE RALPH, A.B., Georgetown College; A.M., University of Virginia.  
Dissertation: *Applications of International Law Under Conditions of Civil Strife.*
- PAFFORD, WARD, A.B., A.M., Emory University.  
Dissertation: *English Bards, and Scotch Reviewers: A Study of Byron's Development as a Satirist.*
- PIERSON, DOLORES LEHMANN, A.B., Brooklyn College; A.M., Columbia University.  
Dissertation: *Heterochromatin in the spermatogenesis of popilius disjunctus Illiger.*
- POTTER, JOHN CLARKSON, B.S., University of Washington.  
Dissertation: *The Solubilities in Water and the Vapor Pressures of Some Organic Fluoride Compounds.*
- PURCELL, JAMES S., JR., A.B., John B. Stetson University; A.M., Duke University.  
Dissertation: *Literary Culture in North Carolina Before 1820.*
- RUSH, JOSEPH HAROLD, B.A., M.A., University of Texas.  
Dissertation: *Absorption Studies of the Vapors of the Isomeric Picolines in the Near Ultraviolet.*
- SMART, HUGH ROBERT GEORGE, A.B., McGill University.  
Dissertation: *The Theories of Space and Time Found in Hume's Writings.*
- SNOKE, JOHN B., B.S., University of Illinois.  
Dissertation: *The Relation of Chemical Structure of Substrates to their Hydrolysis by Proteolytic Enzymes.*
- STONE, EDWARD, B.A., M.A., University of Texas.  
Dissertation: *Henry James and His Sense of the Past.*
- SUTCLIFFE, WILLIAM HUMPHREY, JR., A.B., Emory University; A.M., Duke University.  
Dissertation: *A Qualitative and Quantitative Study of the Surface Zooplankton at Beaufort, North Carolina.*
- SWERLICK, ISADORE, A.B., Temple University.  
Dissertation: *The Synthesis of Some Aromatic Ketones.*
- TODD, RICHARD CECIL, B.S.C. in Educ., Millersville State College; M.Ed., Pennsylvania State College.  
Dissertation: *A History of Confederate Finance.*
- UNTERBERGER, BETTY MILLER, A.B., Syracuse University; M.A., Radcliffe College.  
Dissertation: *America's Siberian Expedition 1918-1920: A Study of National Policy.*
- UNTERBERGER, ROBERT, B.S., Syracuse University.  
Dissertation: *A Stark-Effect Microwave Spectrograph and Microwave Frequency Standard; Their Application to the Investigation of Chloroform.*
- VINSON, JOHN CHALMERS, A.B., Davidson College; A.M., M.F.A., University of Georgia.  
Dissertation: *The Senate and the Washington Conference, 1921-1922.*
- WESSON, WILLIAM HINTON, JR., B.S., North Carolina State College.  
Dissertation: *Salaries and Wages in State Government Employment.*
- WOODRESS, JAMES LESLIE, JR., A.B., Amherst College; A.M., New York University.  
Dissertation: *The Italian Phase of William Dean Howells.*

## ADVANCED DEGREES CONFERRED SEPTEMBER 1, 1949

## MASTER OF ARTS

Butcher, Mary Bright	Jones, Ora Melinda
Cunningham, Noble E., Jr.	Kern, Mary Katharine
Donnan, Sara Kathryn	Lewis, Jo Carolyn
Emerson, Everett Harvey	Musgrove, Janice Alicia
Emerson, Katherine Terrell	Parks, Helen Louise
Gantt, B. T., Jr.	Pegram, Howard McIever
Gelbach, George Knode	Perkins, Betty Sue
Hardin, Hilliard Frances	Powell, Lillie Mae
Helfers, Melvin C.	Robinson, Margaret Enla
Hoge, Phyllis	Scott, Frank Alexander
Hoover, Edna May	Smith, Lawrence Joseph
	Spencer, Ralph Edwin

## MASTER OF EDUCATION

Bagley, Clara Belle	Pitzer, Gladys E.
Boggs, Doyle Willard	Rosinski, Sophie Anne
Craig, Miriam	Scherer, Betty Roszhart
Gustafson, Oscar Thaddeus	Scott, Sammy Alan
Hammack, Benjamin Paul	Somers, Graham Watson
Handley, Ruth Margaret	Spencer, Alyce Oates
Lyne, Nancy Moncure	Stealey, Helen Louise
Martin, Montine	Tate, Margaret Clementine
Nispel, Benjamin S.	Walton, Wesley Wills
Parham, Maston Samuel	

# BULLETIN OF DUKE UNIVERSITY



## Undergraduate Instruction

(Trinity College, the Woman's College, and the  
College of Engineering)

ANNOUNCEMENTS FOR 1951-1952

VOLUME 23

April, 1951

NUMBER 6

# Annual Bulletins

FOR GENERAL BULLETIN OF DUKE UNIVERSITY, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF UNDERGRADUATE INSTRUCTION, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE COLLEGE OF ENGINEERING, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES, apply to *The Dean of the Graduate School*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF FORESTRY, apply to *The Dean of the School of Forestry*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF LAW, apply to *The Dean of the School of Law*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF MEDICINE, apply to *The Dean of the School of Medicine*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF NURSING, apply to *The Dean of the School of Nursing*, Duke University, Durham, N. C.

FOR BULLETIN OF THE DIVINITY SCHOOL, apply to *The Dean of the Divinity School*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SUMMER SESSION, apply to *The Director of the Summer Session*, Duke University, Durham, N. C.

Published by Duke University monthly except in July, August, September, and December. Entered as second-class matter March 25, 1929, at the Post Office of Durham, North Carolina, under the Act of August 24, 1912.

# DUKE UNIVERSITY

TRINITY COLLEGE

THE WOMAN'S COLLEGE

THE COLLEGE OF ENGINEERING



ANNOUNCEMENTS FOR 1951-52





THE CHAPEL

BULLETIN  
OF  
DUKE UNIVERSITY



UNDERGRADUATE INSTRUCTION

TRINITY COLLEGE  
THE WOMAN'S COLLEGE  
THE COLLEGE OF ENGINEERING

1950-1951

ANNOUNCEMENTS FOR 1951-1952

DURHAM, NORTH CAROLINA  
1951

"I request . . . that great care and discrimination be exercised in admitting as students only those whose previous record shows a character, determination, and application evincing a wholesome and real ambition for life."

—JAMES B. DUKE.

# Contents

	PAGE
CALENDAR OF THE COLLEGES.....	7
THE UNDERGRADUATE COLLEGES.....	8
OFFICERS OF THE UNIVERSITY.....	11
The Corporation.....	11
Officers Emeriti.....	12
Officers of Administration.....	13
Officers of Instruction.....	16
Other Officers.....	44
The University Libraries.....	46
ADMISSION TO THE COLLEGES.....	50
FINANCIAL INFORMATION AND LIVING ACCOMMODATIONS.....	53
REGISTRATION AND ACADEMIC REGULATIONS.....	70
THE LIBRARIES.....	75
THE RESERVE OFFICERS TRAINING CORPS.....	77
THE BUREAU OF TESTING AND GUIDANCE.....	79
THE APPOINTMENTS OFFICE.....	79
THE SUMMER SESSION.....	80
REQUIREMENTS FOR DEGREES.....	83
COURSES OF INSTRUCTION: TRINITY COLLEGE AND THE WOMAN'S COLLEGE.....	96
COURSES OF INSTRUCTION: THE COLLEGE OF ENGINEERING.....	166
STUDENT LIFE AND ACTIVITIES.....	175
HONORS AND PRIZES.....	184
INDEX.....	187

# 1951

## JULY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

## AUGUST

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

## SEPTEMBER

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

## OCTOBER

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

## NOVEMBER

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

## DECEMBER

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

# 1952

## JANUARY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

## FEBRUARY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

## MARCH

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

## APRIL

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

## MAY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

## JUNE

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

## JULY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

## AUGUST

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

## SEPTEMBER

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

## OCTOBER

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

## NOVEMBER

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

## DECEMBER

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					



# Calendar of the Colleges

1951

- September 13. Thursday, 9:00 A.M. Dormitories open to freshmen.  
September 13. Thursday, 7:30 P.M. Assembly for all entering freshmen; Freshman Orientation Program begins.  
September 17. Monday. Registration and matriculation of new students with advanced standing, Trinity College and the College of Engineering.  
September 18. Tuesday. Registration and matriculation of new students with advanced standing, Woman's College.  
September 20. Thursday. Instruction begins, fall semester.  
October 30. Tuesday. Junior Examination in English Usage.  
November 10. Saturday. Last day for reporting mid-semester grades.  
November 22. Thursday. Thanksgiving Day: a holiday.  
December 11. Tuesday. Founders' Day.  
December 20. Thursday, 5:00 P.M. Christmas recess begins.

1952

- January 3. Thursday, 8:00 A.M. Instruction is resumed.  
January 16. Wednesday. Mid-year examinations begin.  
January 26. Saturday. Mid-year examinations end.  
January 28. Monday. Registration and matriculation of new students.  
January 29. Tuesday. Last day for matriculation for the spring semester.  
January 30. Wednesday. Instruction begins, spring semester.  
March 13. Thursday. Last day for reporting mid-semester grades.  
March 22. Saturday, 12:30 P.M. Spring recess begins.  
March 31. Monday, 8:00 A.M. Instruction is resumed.  
May 19. Monday. Final examinations begin.  
May 29. Thursday. Final examinations end.  
May 31. Saturday. Commencement begins.  
June 1. Sunday. Commencement Sermon.  
June 2. Monday. Graduating Exercises.

# The Undergraduate Colleges



DUKE UNIVERSITY is built about a group of colleges which have their roots deep in the past. It was founded more than one hundred years ago when a number of earnest citizens from Randolph and adjacent counties assembled in a log school house to organize an educational society. They wished to provide lasting support for the local academy founded a few months before by an energetic son of North Carolina, Brantley York.

Moved by "no small share of philanthropy and patriotism," these men set forth their belief "that ignorance and error are the bane not only of religious but also of civil society" and that they "rear up almost an impregnable wall between man and the happiness he so ardently pants after." On that basis they formally adopted a constitution for the Union Institute Society. Thus in February, 1839, the academy became Union Institute. Twelve years later the Institute was reorganized as Trinity College. In 1892 it was moved from the fields of Randolph County to the growing city of Durham. Thirty-two years later the College grew into Duke University. With increasing enrolment and the development of specialized needs the Woman's College was formed in 1925 and the College of Engineering in 1938.

From academy to university the basic principles have remained constant. The University motto, *Eruditio et Religio*, reflects a fundamental faith in the union of knowledge and religion, the advancement of learning, the defense of scholarship, the love of freedom and truth, a spirit of tolerance, and a rendering of the greatest service to the individual, the state, the nation, and the church. Through changing generations of students the objective has been to encourage each individual to achieve to the extent of his capacities an understanding and appreciation of the world in which he lives, his relationship to it, his opportunities, and his responsibilities.

Duke University is concerned with developing the whole man. In its classrooms, libraries, and laboratories it is concerned with his mental and moral development, in its gymnasiums and on its playing fields, with his physical growth, and in its chapel and religious program, with his spiritual well being. Although it has always been closely associated with the Methodist Church, Duke welcomes students of all

faiths and encourages them to develop their spiritual lives in accordance with the tenets of their own creeds. The need of training for specialized professions and employments is recognized, but such training is incidental to a larger purpose. Through the variety of the subject matter, the insistence on a common core of fundamental courses, and an emphasis on a more intensive study of some selected subject, the colleges seek to give their students a knowledge and appreciation of the culture of the Western World and at the same time to provide a foundation for careers in business and the professions.

The three colleges exist as parts of a university community in which the student has full opportunity to take part. They have a unique role in this community as the centers of individual education for undergraduates, but as members of the University the colleges share in the extensive facilities of laboratory and field work, superior physical equipment, great libraries, and able faculties which only a major university can provide. They share the same campuses with the Graduate School of Arts and Sciences, the Law School, the Medical and Nursing Schools, the Divinity School, the School of Forestry, and the Duke Hospital. A wide range of activities, religious, intellectual, cultural, social, and athletic, are open to the entire university community. At the same time there are other activities and organizations designed specifically for members of each undergraduate college. The student may thus enjoy both the activities and atmosphere of a small college and the broader facilities and challenges provided by the existence of a university community.

Although the three colleges have separate identities, they are closely inter-related. Students of Trinity College and the College of Engineering live in the same dormitories, belong to the same fraternities, hold membership in the same student government association, attend classes in the same buildings. The College of Engineering provides for the specialized interests of its students by offering training in technical fields. At the same time it recognizes the importance of the study of the humanities because it realizes that the engineer has definite responsibilities as a citizen and that these responsibilities cannot be properly stressed in the purely technical curricula. Engineering students, therefore, participate in the academic and extra-curricula life of the liberal arts college as well as in the training and campus activities peculiar to their own college.

As a coordinate college within the University system the Woman's College shares the advantages of the wider community, and yet it offers to its students the special opportunities which belong to a separate woman's college. Women students receive training in leadership by administering their own organizations and by participating in community projects. At the same time they have the stimulus

which comes from co-educational classes and from the experience of working with men of other colleges in campus activities.

Whether in the classroom or on the campus the emphasis is on the individual. To this end, classes are kept small in size and close contact between professor and student is encouraged. Instructors, counsellors, advisers, and administrative officers are interested in the student as a person. In turn the student is expected to accept the responsibility of contributing to his own development, to his college, and to his university. The relationship of mutual service between the individual student and his college is designed to develop men of intelligence, virtue, and culture. From this relationship there has grown through a century and more a sense of achievement and high competence that enables Duke men and women to take their place in the world as effective citizens whatever their careers may be.

# Officers of the University for the Year 1950-51



## *The Corporation*

### THE EXECUTIVE COMMITTEE

The Executive Committee of the University consists of three members from the University Trustees, three from the Endowment Trustees, and the President of the University.

WILLIS SMITH, *Chairman*  
GEORGE GARLAND ALLEN  
ARTHUR HOLLIS EDENS  
ROBERT LEE FLOWERS  
AMOS RAGAN KEARNS  
WILLIAM NEAL REYNOLDS  
ALEXANDER H. SANDS, JR.  
BUNYAN SNIPES WOMBLE

Raleigh, N. C.  
New York, N. Y.  
Durham, N. C.  
Durham, N. C.  
High Point, N. C.  
Winston-Salem, N. C.  
New York, N. Y.  
Winston-Salem, N. C.

### THE UNIVERSITY TRUSTEES

WILLIS SMITH, *Chairman*  
JAMES ARDREY BELL, *Vice-Chairman*  
SIDNEY SHERRILL ALDERMAN  
GEORGE GARLAND ALLEN  
\*EDGAR S. BOWLING  
CHARLES A. CANNON  
ROBERT GREGG CHERRY  
NORMAN ATWATER COCKE  
HENRY CLAY DOSS  
NORMAN EDWARD EDGERTON  
DONALD SILER ELIAS  
BENJAMIN FERGUSON FEW  
ROBERT LEE FLOWERS  
JESSE PAUL FRIZZELLE  
THOMAS McMILLAN GRANT  
PHILLIP FRANK HANES  
PLEASANT HUBER HANES  
JULIUS WELCH HARRISS  
WILLIAM JULIUS HOBBS  
JOSEPH LAWRENCE HORNE  
WALKER INMAN  
GEORGE MELVIN IVEY  
EDWIN LEE JONES  
BENJAMIN EVERETT JORDAN  
AMOS RAGAN KEARNS  
ROBERT ANDREW MAYER  
EDGAR HARRISON NEASE, SR.  
WILLIAM WALTER PEELE  
HUBBARD B. PORTER  
WILLIAM NEAL REYNOLDS

Raleigh, N. C.  
Charlotte, N. C.  
Washington, D. C.  
New York, N. Y.  
New York, N. Y.  
Concord, N. C.  
Gastonia, N. C.  
Charlotte, N. C.  
Detroit, Mich.  
Raleigh, N. C.  
Asheville, N. C.  
New York, N. Y.  
Durham, N. C.  
Snow Hill, N. C.  
Rocky Mount, N. C.  
Winston-Salem, N. C.  
Winston-Salem, N. C.  
High Point, N. C.  
New York, N. Y.  
Rocky Mount, N. C.  
Georgetown, S. C.  
Charlotte, N. C.  
Charlotte, N. C.  
Saxapahaw, N. C.  
High Point, N. C.  
Charlotte, N. C.  
Charlotte, N. C.  
Laurinburg, N. C.  
Raleigh, N. C.  
Winston-Salem, N. C.

\* Died, April 15, 1950.



PAUL LINDSAY SAMPLE  
 ALEXANDER H. SANDS, JR.  
 \*JOSEPH H. SEPAK  
 JAMES BUREN SIDBURY  
 JAMES RAYMOND SMITH  
 WALTER ALBERT STANBURY  
 EARLE WAYNE WEBB  
 BUNYAN SNIPES WOMBLE

McKeesport, Pa.  
 New York, N. Y.  
 Gastonia, N. C.  
 Wilmington, N. C.  
 Mount Airy, N. C.  
 Gastonia, N. C.  
 New York, N. Y.  
 Winston-Salem, N. C.

## *Officers Emeriti*

ALICE MARY BALDWIN, Ph.D., LL.D. <i>Professor Emeritus of History</i>	406 Swift Avenue
JOSEPH PENN BREEDLOVE, M.A. <i>Librarian Emeritus</i>	407 Watts Street
†THADDEUS DILLARD BRYSON, LL.D. <i>Professor Emeritus of Law</i>	Bryson City, N. C.
CHARLES WILLIAM EDWARDS, A.M., M.S. <i>Professor Emeritus of Physics</i>	406 Buchanan Boulevard
WILLIAM STONE FITZGERALD, A.M. <i>Instructor Emeritus of English</i>	603 Watts Street
MRS. LILLIAN B. GRIGGS, B.A. in L.S. <i>Librarian Emeritus</i>	915 Monmouth Avenue
HUGO CLAUDE HORACK, LL.B., LL.D. <i>Professor Emeritus of Law</i>	Arlington, Va.
CHARLES ALBERT KRUMMEL, Ph.D. <i>Professor Emeritus of German</i>	2118 Englewood Avenue
BRODIE C. NALLE <i>Trustee Emeritus</i>	Charlotte, N. C.
JESSE MARVIN ORMOND, B.D., D.D. <i>Professor Emeritus of Practical Theology</i>	110 Pinecrest Road
ARTHUR SPEERY PEARSE, Ph.D., LL.D. <i>Professor Emeritus of Zoology</i>	803 Second Street
CHARLES WILLIAM PEPPLER, Ph.D. <i>Professor Emeritus of Greek</i>	406 Buchanan Boulevard
GILBERT THEODORE ROWE, S.T.D., D.D., LL.D. <i>Professor Emeritus of Christian Doctrine</i>	150 Pinecrest Road
ELBERT RUSSELL, Ph.D., LL.D. <i>Dean Emeritus of the Divinity School</i>	Mobile, Ala.
MRS. MARY HENDREN VANCE, A.M. <i>Assistant Professor Emeritus of English</i>	New Bern, N. C.
ALBERT MICAIAH WEBB, A.M. <i>Professor Emeritus of Romance Languages</i>	1017 Trinity Avenue
ROBERT NORTH WILSON, M.S. <i>Professor Emeritus of Chemistry</i>	822 Third Street
EDWARD HUDSON YOUNG, A.M. <i>Assistant Professor Emeritus of Romance Languages</i>	107 Watts Street

\* Died, April 30, 1950.

† Died, August 28, 1950.

*Officers of Administration*

## GENERAL ADMINISTRATION

ARTHUR HOLLIS EDENS, Ph.D., LL.D. <i>President of the University</i>	West Campus
ROBERT LEE FLOWERS, A.M., LL.D. <i>Chancellor of the University</i>	West Campus
WILLIAM HANE WANNAMAKER, A.M., Litt.D. <i>Vice-Chancellor of the University</i>	West Campus
PAUL MAGNUS GROSS, Ph.D. <i>Vice-President in the Educational Division</i>	Hope Valley
CHARLES EDWARD JORDAN, A.B., LL.D. <i>Vice-President in the Division of Public Relations</i>	813 Vickers Avenue
HERBERT JAMES HERRING, M.A., LL.D. <i>Vice-President in the Division of Student Life</i>	2010 Myrtle Drive
ALFRED SMITH BROWER, A.B. <i>Business Manager and Comptroller</i>	1550 Hermitage Court
CHARLES BLACKWELL MARKHAM, A.M. <i>Treasurer of the University</i>	204 Dillard Street

## EDUCATIONAL ADMINISTRATION

PAUL MAGNUS GROSS, Ph.D. <i>Vice-President in the Educational Division</i>	Hope Valley
---	-------------

## The Colleges

HERBERT JAMES HERRING, M.A., LL.D. <i>Dean of Trinity College</i>	2010 Myrtle Drive
ROBERTA FLORENCE BRINKLEY, Ph.D. <i>Dean of the Woman's College</i>	East Campus
WILLIAM HOLLAND HALL, A.M., M.S.C.E. <i>Dean of the College of Engineering</i>	922 Urban Avenue
ALAN KREBS MANCHESTER, Ph.D. <i>Dean of Undergraduate Studies</i>	2016 Myrtle Drive
ROBERT B. COX, A.M. <i>Dean of Undergraduate Men</i>	1107 Ninth Street
EVERETT BROADUS WEATHERSPOON, A.B. <i>Director of Admissions, Trinity College and the College of Engineering</i>	125 Pinecrest Road
MRS. ELIZABETH ANDERSON PERSONS, A.M. <i>Director of Admissions, Woman's College</i>	612 Swift Avenue
ELLEN HARRIS HUCKABEE, A.M. <i>Associate Dean of Undergraduate Instruction, Woman's College</i>	1507 W. Pettigrew Street
MARIANNA JENKINS, Ph.D. <i>Associate Dean of Undergraduate Instruction, Woman's College</i>	2304 Cranford Road
JAMES MATTHEW SLAY, A.M. <i>Assistant Dean of Trinity College</i>	1222 Arnette Avenue
WILLIAM COUNCILL ARCHIE, Ph.D. <i>Assistant Dean in Charge of Freshmen, Trinity College and the College of Engineering</i>	2306 Cranford Road

MARGARET COLEMAN, A.M. <i>Recorder, Trinity College and the College of Engineering</i>	918 Urban Avenue
LOUISE SEABOLT, A.M. <i>Recorder, Woman's College</i>	Faculty Apartments
HELEN MILDRED KENDALL, A.B. <i>Recorder, Divinity School</i>	Faculty Apartments
WILLIAM LAMBETH BRINKLEY, A.B. <i>Field Secretary, Undergraduate Admissions</i>	West Campus
AMY DRAKE, A.B. <i>Field Secretary, Undergraduate Admissions</i>	Erwin Apartments
WILLIAM JACKSON GRIFFITH, A.B. <i>Field Secretary, Undergraduate Admissions</i>	West Campus

### Graduate and Professional Schools

PAUL MAGNUS GROSS, Ph.D. <i>Dean of the Graduate School of Arts and Sciences</i>	Hope Valley
JOSEPH CLARKE ROBERT, Ph.D. <i>Associate Dean of the Graduate School of Arts and Sciences</i>	1102 B Street
JAMES CANNON, III, A.M., Th.M., D.D. <i>Dean of the Divinity School</i>	803 Second Street
JOSEPH A. McCLAIN, JR., J.S.D., LL.D. <i>Dean of the School of Law</i>	2021 Myrtle Drive
WILBURT CORNELL DAVISON, D.Sc., M.D., LL.D. <i>Dean of the School of Medicine</i>	Hope Valley
FLORENCE K. WILSON, M.A. <i>Dean of the School of Nursing</i>	Faculty Apartments
CLARENCE FERDINAND KORSTIAN, Ph.D. <i>Dean of the School of Forestry</i>	4 Sylvan Road
PAUL HIBBERT CLYDE, Ph.D. <i>Director of the Summer Session</i>	Cole Mill Road
CAZLYN GREEN BOOKHOUT, Ph.D. <i>Director of the Duke Marine Laboratory</i>	1307 Alabama Avenue
CHARLES EUGENE WARD, Ph.D. <i>Director of Admissions, Graduate School of Arts and Sciences</i>	2429 Perkins Road

### BUSINESS ADMINISTRATION

ALFRED SMITH BROWER, A.B. <i>Business Manager and Comptroller</i>	1550 Hermitage Court
CHARLES BLACKWELL MARKHAM, A.M. <i>Treasurer of the University</i>	204 Dillard Street
CHARLES EDWARD JORDAN, A.B., LL.D. <i>Secretary of the University</i>	813 Vickers Avenue
EDWIN CONSTANT BRYSON, LL.B. <i>University Attorney</i>	Sycamore Street
GERRIARD CHESTER HENRICKSEN, C.P.A. <i>Assistant Business Manager and Assistant Comptroller</i>	216 Forest Wood Drive
JOHN M. DOZIER, A.B. <i>Assistant Secretary of the University</i>	2111 Ruffin Street
WILLIAM EDWARD WHITFORD, A.B. <i>Director of Operation and Maintenance</i>	804 Third Street

THEODORE WARREN MINAH, B.S. in H.M. <i>Manager of Dining Hall Operations</i>	2117 Club Boulevard
ISABELLE HOWE, B.S. <i>Manager, the Dining Halls, Woman's College</i>	111 Watts Street
JOHN ELLWOOD DEXLEY, A.M. <i>Purchasing Agent</i>	1004 Broad Street
JESSE DAVID WELLONS, JR. <i>Manager of Stores Operations</i>	2703 Augusta Drive
WALTER GLEN COOPER, B.A. <i>Personnel Director</i>	1518 Echo Road
WILLIAM KENNETH HOWARD, B.S. <i>Maintenance Engineer</i>	106 Pinecrest Road
HENRY FRANKLIN BOWERS, A.B. <i>Manager of Operations</i>	Duke University Apartments
ERNEST LEE HAYWOOD, A.B. <i>Chief Accountant</i>	104 Hilton Avenue
JAMES FRANKLIN COUSINS, C.P.A. <i>Auditor</i>	416 Carolina Circle
KENNETH R. MANNING, A.B. <i>Supervisor, Budgets and Reports</i>	900 Midland Terrace
HENRY SPECK MORGAN, A.B. <i>Chief Clerk, Treasurer's Office</i>	409 Francis Street
ROBERT BEVERIDGE FLARING <i>Adviser, Student Activities</i>	1803 Forest Road
CARL A. BOY <i>Superintendent of Utilities</i>	2214 Erwin Road
JOHN C. GIFT <i>Superintendent of Building Maintenance</i>	811 Fifth Street

## PUBLIC RELATIONS

CHARLES EDWARD JORDAN, A.B., LL.D. <i>Vice-President in the Division of Public Relations</i>	813 Vickers Avenue
JOHN M. DOZIER, A.B. <i>Assistant to the Vice-President in the Division of Public Relations; Executive Secretary, University Scholarship Committee</i>	2111 Ruffin Street
EDWARD L. FIKE, A.B. <i>Director, Bureau of Public Information</i>	801 Third Street
EARL W. PORTER, A.B., B.J. <i>Assistant Director, Bureau of Public Information</i>	1013 Dacian Avenue
GLENN EDWARD MANN, A.B. <i>Director, Sports Publicity</i>	Cole Mill Road
FANNIE YARBROUGH MITCHELL <i>Director, Appointments Office</i>	16 Alastair Court

## ALUMNI AFFAIRS

CHARLES AUBREY DUKES, A.B. <i>Director</i>	1309 Oakland Avenue
ANNE GARRARD, A.M. <i>Assistant Director</i>	1023 Gloria Avenue

WILLIAM ALLEN TYREE, A.B. <i>Field Secretary, Duke University Loyalty Fund</i>	610 Buchanan Boulevard
*CODY HEBER SMITH, A.B. <i>Assistant to the Director</i>	2115 Club Boulevard
CHARLOTTE CORBIN, A.B. <i>Assistant to the Director</i>	403 W. Chapel Hill Street
ROGER MARSHALL, A.B. <i>Assistant to the Director and Alumni Editor</i>	1829 Forest Road
THOMAS D. DONEGAN, A.B. <i>Secretary of Local Associations</i>	Westover Park Apartments
PATSY G. MCKAY, A.B. <i>Recorder</i>	Route 2, Roxboro Road

## *Officers of Instruction*

### INSTRUCTIONAL STAFF

*All members of the several faculties of the University are included. The date denotes the first year of service.*

FRANCES DOROTHY ACOMB (1945), Ph.D. <i>Assistant Professor of History</i>	Faculty Apartments
†DONALD KEITH ADAMS (1931), Ph.D. <i>Professor of Psychology</i>	2508 Cornwallis Road
RUTH MARGERY ADDOMS (1930), Ph.D. <i>Professor of Botany</i>	1413 North Duke Street
TROGLER F. ADKINS (1938), M.D. <i>Instructor in Obstetrics and Gynecology</i>	2108 Sprunt Street
EDWIN PASCAL ALYEA (1930), M.D. <i>Professor of Urology</i>	Hope Valley
LEWIS EDWARD ANDERSON (1936), Ph.D. <i>Associate Professor of Botany</i>	2020 Sunset Avenue
ROGER FABIAN ANDERSON (1950), Ph.D. <i>Associate Professor of Forest Entomology</i>	1212 Sixth Street
WILLIAM BANKS ANDERSON (1930), M.D. <i>Professor of Ophthalmology</i>	502 East Forest Hills Boulevard
WILLIAM COUNCILL ARCHIE (1946), Ph.D. <i>Assistant Professor of Romance Languages</i>	2306 Cranford Road
JAY MORRIS ARENA (1933), M.D. <i>Associate Professor of Pediatrics</i>	2032 Club Boulevard
RALPH ARANOVITZ ARNOLD (1946), M.D. <i>Associate Professor of Otolaryngology and Ophthalmology</i>	415 Carolina Circle
ARTHUR GARWOOD ASHBROOK (1947), Ph.D. <i>Assistant Professor of Economics</i>	1003 Green Street
†ROBERT J. ATWELL (1948), M.D. <i>Instructor in Medicine</i>	University Apartments
THEODORE WINSLOW ATWOOD (1934), D.M.D. <i>Associate in Dentistry</i>	Devon Road, Hope Valley

\* Resigned, January 15, 1951.

† Absent on sabbatical leave, spring semester, 1950-51.

‡ Resigned, June 30, 1950.



THOMAS MALCOLM AYCOCK (1937), M.A. <i>Professor of Physical Education</i>	University Apartments
JOSEPH RANDLE BAILEY (1946), Ph.D. <i>Assistant Professor of Zoology</i>	Duke University Apartments
HORACE MITCHELL BAKER, JR. (1948), M.D. <i>Instructor in Surgery</i>	2315 Wilson Street
LENOX DIAL BAKER (1937), M.D. <i>Professor of Orthopaedic Surgery</i>	Hope Valley
MARIE BALDWIN (1949), M.D. <i>Instructor in Neuropsychiatry</i>	Duke Hospital
*KATHARINE MAY BANHAM (1946), Ph.D. <i>Associate Professor of Psychology</i>	115 North Dillard Street
SHERWOOD W. BAREFOOT (1946), M.D. <i>Instructor in Dermatology and Syphilology</i>	Greensboro, N. C.
JAMES FOSTER BARNES (1929), A.M. <i>Lecturer in Church Music</i>	2401 Cranford Road
BETTY GREEN BASON (1949), R.N., B.S. <i>Instructor in Medical Nursing</i>	2100 Erwin Road
PAULL FRANKLIN BAUM (1922), Ph.D. <i>Professor of English</i>	112 Pinecrest Road
GEORGE JAY BAYLIN (1939), M.D. <i>Professor of Radiology and Associate in Anatomy</i>	2260 Cranford Road
WILLIAM WALDO BEACH (1946), Ph.D. <i>Associate Professor of Christian Ethics</i>	100 Vineyard Street
†JAMES ALLEN BEAL (1939), Ph.D. <i>Professor of Forest Entomology</i>	2232 Cranford Road
MRS. DOROTHY WATERS BEARD (1938), R.N. <i>Research Associate in Surgery</i>	Hillsboro, N. C.
JOSEPH WILLIS BEARD (1937), M.D. <i>Professor of Surgery in Charge of Experimental Surgery; Associate Professor of Virology</i>	Hillsboro, N. C.
ROBERT L. BENNETT (1946), M.D. <i>Lecturer in Physical Medicine</i>	Duke Hospital
KLAUS WILLIAM BERBLINGER (1950), M.D. <i>Associate in Neuropsychiatry</i>	2318 Huron Circle
FREDERICK BERNHEIM (1930), Ph.D. <i>Professor of Pharmacology</i>	Woodridge Drive
MRS. MARY LILIAS CHRISTIAN BERNHEIM (1930), Ph.D. <i>Associate Professor of Biochemistry</i>	Woodridge Drive
EDWARD WILLARD BERRY (1936), Ph.D. <i>Professor of Geology</i>	1003 North Gregson Street
MRS. HELEN SMITH BEVINGTON (1943), M.A. <i>Assistant Professor of English</i>	Guess Road
MERLE MOWBRAY BEVINGTON (1942), Ph.D. <i>Associate Professor of English</i>	Guess Road
LUCIUS AURELIUS BIGELOW (1929), Ph.D. <i>Professor of Chemistry</i>	131 Pinecrest Road

\* Absent on leave, 1950-51.

† Resigned, September 1, 1950.

HAROLD CRUSIUS BIRD (1926), Ph.B., C.E. <i>Professor of Civil Engineering</i>	1209 Virginia Avenue
MARTIN LEE BLACK, JR. (1930), M.B.A., C.P.A. <i>Professor of Accounting</i>	135 Pinecrest Road
WILLIAM MAXWELL BLACKBURN (1926), Ph.D. <i>Associate Professor of English</i>	2101 Ward Street
BERNARD BLACK-SCHIAFFER (1945), M.D. <i>Associate Professor of Pathology</i>	Piedmont Apartments
ROBERT LINCOLN BLAKE (1949) <i>Instructor in Medical Art and Illustration</i>	609 Ruby Street
HUGO LEANDER BLONQUIST (1920), Ph.D. <i>Professor of Botany</i>	922 Demerius Street
JANET SHIRLEY BLUE (1950), A.B. <i>Visiting Instructor in Romance Languages</i>	805 Third Street
EDNA MAY BLUMENTHAL (1950), B.S. <i>Lecturer in Physical Therapy</i>	1507 West Pettigrew Street
*MRS. WANDA SLAYBAUGH BOARDMAN (1947), R.N., A.B., B.S. <i>Instructor in Medical Nursing</i>	819 Third Street
WILLIAM BRYAN BOLICH (1927), M.A., B.C.L. <i>Professor of Law</i>	Hope Valley
EDWARD CLAUDE BOLMEIER (1948), Ph.D. <i>Associate Professor of Education</i>	Faculty Apartments
GEORGE F. BOND (1949), M.D. <i>Instructor in General Practice of Medicine</i>	Duke Hospital
ALLAN HADLEY BONE (1944), M.M. <i>Assistant Professor of Music</i>	2314 Club Boulevard
†FRANK CUTCHIN BONE (1948), M.D. <i>Instructor in Medicine</i>	1408 Duke University Road
CAZLYN GREEN BOOKHOOT (1935), Ph.D. <i>Associate Professor of Zoology</i>	1307 Alabama Avenue
MRS. ELIZABETH CIRCLE BOOKHOOT (1932-43; 1945), M.S. <i>Associate Professor of Physical Education</i>	1307 Alabama Avenue
FRANCIS EZRA BOWMAN (1945), Ph.D. <i>Associate Professor of English</i>	1503 Alabama Avenue
BENJAMIN BOYCE (1950), Ph.D. <i>Professor of English</i>	116 Pinecrest Road
RALPH ANDERS BRACKETT (1949), B.S., Lieutenant, U. S. Navy <i>Assistant Professor of Naval Science</i>	105 Fifth Avenue
DAVID GILBERT BRADLEY (1949), Ph.D. <i>Assistant Professor of Religion</i>	405 Carver Street
CHARLES KILGO BRADSHER (1939), Ph.D. <i>Associate Professor of Chemistry</i>	2318 Englewood Avenue
JOHN SAEGER BRADWAY (1931), A.M., LL.B. <i>Professor of Law</i>	2621 Stuart Drive
ROYALL N. BRANDIS (1949), M.A. <i>Instructor in Economics</i>	814 Green Street
J. STREET BREWER (1949), M.D. <i>Instructor in General Practice of Medicine</i>	Roseboro, N. C.

\* Resigned, April 15, 1950.

† Resigned, June 30, 1950.

- ROBERT PALMER BREWER (1949), A.B., Lieutenant, U. S. Navy  
*Assistant Professor of Naval Science* 3030 University Drive
- JOHN P. BRIGGS (1950), M.D.  
*Instructor in Neuropsychiatry* 2413 University Drive
- ROBERTA FLORENCE BRINKLEY (1947), Ph.D.  
*Professor of English* East Campus
- THOMAS RAY BROADBENT (1950), M.D.  
*Instructor in Surgery* 1408 Duke University Road
- \* ROBERT A. BROOME, JR. (1948), M.D.  
*Instructor in Medicine* University Apartments
- CHANDLER WILCOX BROWN (1947), B.S. in C.E.  
*Instructor in Civil Engineering* 1423 Woodland Drive
- FRANCES CAMPBELL BROWN (1931), Ph.D.  
*Associate Professor of Chemistry* 205 Jones Street
- IVAN WILLARD BROWN, JR. (1940-42; 1945), M.D.  
*Associate in Surgery* 2314 Woodrow Street
- WADE G. BROWN (1947), A.B.  
*Instructor in Preventive Medicine and Public Health* Duke Hospital
- WILLIAM HUGH BROWNLEE (1948), Ph.D.  
*Assistant Professor of Old Testament* 1014 Edith Street
- MARSHALL N. BRUCER (1950), M.D.  
*Lecturer in Physiology* Duke Hospital
- JEANETTE ELIZABETH BRYANT (1949), R.N., B.S.  
*Instructor in Surgical Nursing* 2204 Erwin Road
- EDWIN CONSTANT BRYSON (1931), LL.B.  
*Associate Professor of Law, and Instructor in Hospital Administration* 1023 Sycamore Street
- EVERETT I. BUGG, JR. (1946), M.D.  
*Instructor in Orthopaedics* 1544 Hermitage Court
- THOMAS WADE BURNS (1950), M.D.  
*Instructor in Medicine* 2302 Cranford Road
- JOHN BRADLEY CAHOON (1950), R.T., A.S.X.T.  
*Instructor in X-Ray Technology* University Apartments
- JASPER LAMAR CALLAWAY (1937), M.D.  
*Professor of Dermatology and Syphilology* 828 Anderson Street
- EDMUND McCULLOUGH CAMERON (1926), A.B.  
*Director of Physical Education and Athletics, and Assistant Coach of Football* Hope Valley
- LACHLAN L. CAMPBELL (1950), M.D.  
*Instructor in Medicine* Aycock Apartments
- † WILLIAM L. CANINE, JR. (1947), M.A.  
*Instructor in English* Duke University Apartments
- JAMES CANNON, III (1919) A.M., Th.M., D.D.  
*Ivey Professor of History of Religion and Missions* 803 Second Street
- LEONARD CARLITZ (1932), Ph.D.  
*Professor of Mathematics* 2303 Cranford Road
- DAVID WILLIAMS CARPENTER (1929), Ph.D.  
*Professor of Physics* 137 Pinecrest Road

\* Resigned, June 30, 1950.

† Resigned, September 1, 1950.

- JOHN WINDER CARR, JR. (1926), Ph.D.  
*Professor of Education* 926 Monmouth Avenue
- EBER MALCOLM CARROLL (1923), Ph.D.  
*Professor of History* University Apartments
- R. CHARMAN CARROLL (1944), R.N., M.D.  
*Associate in Neuropsychiatry* Duke Hospital
- KYLE CARSON (1949), R.N., A.B.  
*Instructor in Medical Nursing* 915 Sixth Street
- BAYARD CARTER (1931), M.D.  
*Professor of Obstetrics and Gynecology* 2111 Myrtle Drive
- NAOMI RUTH CARTER (1949), R.N., B.S.  
*Instructor in Surgical Nursing* 2102 Erwin Road
- CHESTER CASSEL (1949), M.D.  
*Instructor in Medicine* 1203 Ruffin Street
- MRS. HELEN KENNARD CASTELLANO (1947), A.M.  
*Instructor in Romance Languages* 805 Third Street
- JUAN RODRÍGUEZ CASTELLANO (1947), Doctor en Filosofía y Letras  
*Associate Professor of Romance Languages* 805 Third Street
- MRS. ROMA SAWYER CHEEK (1947), Ph.D.  
*Instructor in Political Science* 1011 Dacian Avenue
- BENJAMIN GUY CHILDS (1924), M.A.  
*Professor of Education* 1019 West Markham Avenue
- ROBERT W. CHRIST (1948), M.S.  
*Assistant Librarian* 1403 Watts Street
- MARGARET CHURCH (1946), Ph.D.  
*Instructor in English* Cole Mill Road
- ELON HENRY CLARK (1934)  
*Associate Professor of Medical Art and Illustration* 1300 Oakland Avenue
- KENNETH WILLIS CLARK (1931), Ph.D.  
*Professor of New Testament* 1308 West Markham Avenue
- LELIA R. CLARK (1949), R.N., M.A.  
*Assistant Professor of Nursing Education* Baker House
- ROBERT W. CLARK (1950), A.B., Captain, U. S. Air Force  
*Assistant Professor of Air Science* 1109 North Gregson Street
- JAMES TOUGH CLELAND (1945), M.A., Th.M.  
*Professor of Homiletics* 2117 Myrtle Drive
- PAUL HIBBERT CLYDE (1937), Ph.D.  
*Professor of History* 406 Cole Mill Road
- CLARENCE H. COBB (1934), Ph.G.  
*Instructor in Hospital Administration* 402 Morehead Avenue
- LOUIS DAVID COHEN (1946), Ph.D.  
*Assistant Professor of Psychology, and Assistant Professor of Neuropsychiatry* 913 Monmouth Avenue
- THEODORE STANLEY COILE (1935), Ph.D.  
*Professor of Forest Soils* Hillsboro Road
- ROBERT TAYLOR COLE (1935), Ph.D.  
*Professor of Political Science* 7 Sylvan Road
- JOHN P. COLLINS (1948), M.D.  
*Instructor in Surgery* 812 Green Street

- JOEL G. COLTON (1947), Ph.D.  
*Instructor in History* University Apartments
- NORMAN FRANCIS CONANT (1935), Ph.D.  
*Professor of Mycology, and Associate Professor of Bacteriology* Old Cornwallis Road
- RICHARD GRIGSBY CONNAR (1950), M.D.  
*Instructor in Surgery* Alastair Apartments
- ROBERT HOWE CONNERY (1949), Ph.D.  
*Professor of Political Science* 906 Buchanan Boulevard
- SYLVESTER DANIEL COOK (1950), M.A.  
*Instructor in English* 15 Hawthorne Drive
- ALBERT DERWIN COOPER (1934), M.D.  
*Instructor in Medicine* 1006 Dacian Avenue
- THOMAS HOWARD CORDLE (1950), M.A.  
*Instructor in Romance Languages* 2012 Ward Street
- ALFRED NIXON COSTNER (1950), M.D.  
*Instructor in Ophthalmology* 1124 Forest Hills Boulevard
- FREDERICK AUGUSTUS GRANT COWPER (1918), Ph.D.  
*Professor of Romance Languages* 1017 Dacian Avenue
- HOYLE W. CRAIG (1950)  
*Technical Instructor in Bacteriology* 1207 Alabama Avenue
- ROBERT LAWRENCE CRAIG (1938), M.D.  
*Associate in Neuropsychiatry* Duke Hospital
- HATTIE MILDRED CRAWLEY (1946), R.N., B.S.  
*Instructor in Nursing Arts* Baker House
- ROBERT NOWELL CREADICK (1946), M.D.  
*Assistant Professor of Obstetrics and Gynecology* 2226 Elba Street
- MASON CRUM (1930), Ph.D., Litt.D.  
*Associate Professor of Biblical Literature* 912 Anderson Street
- JOHN SHELTON CURTISS (1945), Ph.D.  
*Associate Professor of History* 718 Vickers Avenue
- ROBERT EARL CUSHMAN (1945), Ph.D.  
*Professor of Systematic Theology* 130 Pinecrest Road
- \* JOHN TINDALL CUTTINO (1946), M.D.  
*Associate in Pathology* 1616 Delaware Avenue
- W. KENNETH CUYLER (1938), Ph.D.  
*Research Instructor in Obstetrics, and Gynecologic Laboratory Technician* Pickett Road
- BINGHAM DAI (1943), Ph.D.  
*Professor of Mental Hygiene and Psychotherapy; Professor of Psychology (Part-time)* 3407 Chapel Hill Street
- WILLIAM DAVID DAVIES (1950), B.D., D.D.  
*Professor of Biblical Theology* Duke University Apartments
- CLARENCE D. DAVIS (1950), M.D.  
*Instructor in Obstetrics and Gynecology and in Endocrinology* 2301 West Club Boulevard
- COURTLAND HARWELL DAVIS, JR. (1950), M.D.  
*Instructor in Neurology* 1803 Hillcrest Drive
- GIFFORD DAVIS (1930), Ph.D.  
*Associate Professor of Romance Languages* 2248 Cranford Road

\* Resigned, July 1, 1950.



MRS. ATALA THAYER SCUDDER DAVISON (1942), M.D. <i>Instructor in Pediatrics</i>	Hope Valley
WILBURT CORNELL DAVISON (1927), M.D., D.Sc., LL.D. <i>Professor of Pediatrics</i>	Hope Valley
JOHN ESSARY DEES (1939), M.D. <i>Associate Professor of Urology</i>	413 Carolina Circle
MRS. SUSAN COONS DEES (1939), M.D. <i>Associate Professor of Pediatrics and Allergy</i>	413 Carolina Circle
JEAN-JACQUES DEMOREST (1948), Ph.D. <i>Assistant Professor of Romance Languages</i>	Carolee Apartments
WILLIAM ERNEST DETURK (1949), M.D., Ph.D. <i>Assistant Professor of Pharmacology</i>	1212 Ruffin Street
FRANK TRAVER DE VYVER (1935), Ph.D. <i>Professor of Economics</i>	8 Sylvan Road
DONALD DEWEY (1950), M.A. <i>Assistant Professor of Economics</i>	124 West Lynch Street
MACDONALD DICK (1932), M.D. <i>Assistant Professor of Physiology and Pharmacology, and Associate in Medicine</i>	Hope Valley
ROBERT L. DICKENS (1949), M.S. <i>Instructor in Accounting</i>	Duke University Apartments
RUSSELL LESLIE DICKS (1948), B.D., D.D., D.Litt. <i>Associate Professor of Pastoral Care</i>	2308 Prince Street
*WAKEFIELD DORT (1948), M.S. <i>Instructor in Geology</i>	Duke University
HUGH DORTCH, JR. (1951), M.D. <i>Associate in Pathology</i>	2108 Cole Road
†MRS. MARIE-THERESE LINIERE DOW (1934), L. ès L., M.A. <i>Instructor in Romance Languages</i>	2252 Cranford Road
‡NEAL DOW (1934), Ph.D. <i>Assistant Professor of Romance Languages</i>	2252 Cranford Road
FRANCIS GEORGE DRESSSEL (1929), Ph.D. <i>Associate Professor of Mathematics</i>	309 Francis Street
KENNETH LINDSAY DUKE (1940), Ph.D. <i>Associate Professor of Anatomy</i>	701 Club Boulevard
BRADFORD DUNHAM (1950), Ph.D. <i>Instructor in Philosophy</i>	603 Watts Street
GEORGE SHARP EADIE (1930), Ph.D. <i>Professor of Physiology and Pharmacology</i>	Hope Valley
WATT WEEMS EAGLE (1930), M.D. <i>Professor of Otolaryngology</i>	804 Anderson Street
RALPH EARLE, JR. (1948), B.S., Captain, U. S. Navy <i>Professor of Naval Science</i>	2101 Myrtle Drive
MRS. ELEANOR BEAMER EASLEY (1934), M.D. <i>Associate in Obstetrics and Gynecology</i>	Guess Road
HOWARD EASLEY (1930), Ph.D. <i>Associate Professor of Education</i>	Guess Road

\* Resigned, September 1, 1950.

† Absent on leave, fall semester, 1950-51.

‡ Absent on sabbatical leave, fall semester, 1950-51.

- HARRY CLAUDE MACCOLL EASTMAN (1949), M.A.  
*Instructor in Economics* Alastair Apartments
- ARTHUR ROY ECKARDT (1950), Ph.D.  
*Assistant Professor of Religion* 2704 Cammie Street
- MRS. BARBARA B. ECKERT (1950), R.N., M.A.  
*Clinical Instructor in Pediatric Nursing* 1302 Lakewood Avenue
- FRANKLIN NICHOLAS EGERTON (1945), A.M., E.E.  
*Assistant Professor of Electrical Engineering* 411 North Gregson Street
- WILLIAM WHITFIELD ELLIOTT (1925), Ph.D.  
*Professor of Mathematics* Hillandale Road
- LEON HUBBARD ELLIS (1947), Ph.D.  
*Lecturer in Political Science* 2428 Perkins Road
- ERNEST ELSEVIER (1950), M.S.  
*Instructor in Mechanical Engineering* 310 South Gregson Street
- FRANK LIEBMAN ENGEL (1947), M.D.  
*Assistant Professor of Medicine, and Associate in Physiology* 2111 Pershing Street
- JESSE HARRISON EPPERSON (1930), B.S.  
*Instructor in Preventive Medicine and Public Health* 1601 Hermitage Court
- MARY ELLEN ESTILL (1949), Ph.D.  
*Instructor in Mathematics* Faculty Apartments
- JOHN WENDELL EVERETT (1932), Ph.D.  
*Professor of Anatomy* 2605 University Drive
- ROBINSON OSCAR EVERETT (1950), LL.B.  
*Assistant Professor of Law* 119 North Dillard Street
- JOHN MORTON FEIN (1950), Ph.D.  
*Assistant Professor of Romance Languages* Carolee Apartments
- JAMES RONE FELTS, JR. (1949), A.B.  
*Instructor in Hospital Administration* Charlotte, N. C.
- ARTHUR BOWLES FERGUSON (1939), Ph.D.  
*Assistant Professor of History* 209 Woodridge Drive
- GEORGE BURTON FERGUSON (1937), M.D.  
*Associate in Bronchoscopy* Hope Valley
- JAMES CARL FETTERS (1949), B.A., Captain, U. S. Marine Corps  
*Assistant Professor of Naval Science* 2403 University Drive
- MARSHALL L. FISHER (1949), M.D.  
*Associate in Neuropsychiatry* Roanoke, Va.
- MRS. JULIA FLEMING (1949), R.N., B.S.  
*Instructor in Psychiatric Nursing* Baker House
- WILLIAM JOHNSON FLEMING (1949), M.D.  
*Instructor in Medicine* Randolph Road
- \*ARTHUR H. FLOWER, JR. (1948), M.D.  
*Associate in Dermatology and Syphilology* 2617 Hillsboro Road
- NORMAN FOERSTER (1948), A.M., Litt.D.  
*Visiting Professor in English (Part-time)* Chapel Hill, N. C.
- WILEY DAVIS FORBUS (1930), M.D.  
*Professor of Pathology* Hope Valley

\* Resigned, July 5, 1950.

- CHARLES DARBY FULTON, JR. (1950), Sc.D.  
*Assistant Professor of Mechanical Engineering* 1614 University Drive
- LEWIS McLEOD FULTON, JR. (1949), Ph.D.  
*Instructor in Mathematics* 408 McMannen Street
- OLIVE VALERIA GALLOWAY (1950), B.S., B.S.N.Ed.  
*Clinical Instructor in Medical Nursing* 205 Cornwallis Road
- CLARENCE ELLSWORTH GARDNER, JR. (1930), M.D.  
*Professor of Surgery* Hope Valley
- NORMAN GARMEZY (1950), Ph.D.  
*Assistant Professor of Psychology* Hope Valley
- \*JAMES RICHARD GARRETT (1947), Ph.D.  
*Visiting Instructor in Mathematics* 305 Northwood Circle
- \*MRS. LUCILE DRAPER GAULT (1947), M.A.  
*Instructor in Romance Languages* Chapel Hill, N. C.
- JOHN JAY GERGEN (1936), Ph.D.  
*Professor of Mathematics* 2803 Nation Avenue
- ALLAN H. GILBERT (1920), Ph.D.  
*Professor of English* 503 Compton Place
- MRS. KATHARINE EVERETT GILBERT (1930), Ph.D., Litt.D.  
*Professor of Philosophy* 503 Compton Place
- STEPHEN ARNOLD GINN (1950), M.D.  
*Instructor in Neuropsychiatry* 326 Clark Street
- WALKER FORREST GIVAN (1947), Ph.D.  
*Instructor in History* 611 Watts Street
- †JOHN C. GLENN, JR. (1949), M.D.  
*Assistant Professor of Radiology* 2204 Pershing Street
- SIDNEY JAMES GOFFARD (1947), Ph.D.  
*Assistant Professor of Psychology* 1003 Lamond Avenue
- CLARENCE L. F. GOHDES (1930), Ph.D.  
*Professor of American Literature* 2614 Stuart Drive
- JOSEPH LEONARD GOLDNER (1950), M.D.  
*Associate in Orthopaedics* 906 Demerius Street
- JEWETT GOLDSMITH (1949), M.D.  
*Associate in Neuropsychiatry* 1517 North Duke Street
- WALTER GORDY (1946), Ph.D.  
*Professor of Physics* 233 Forest Wood Drive
- WILLIAM ALEXANDER GRAHAM (1938), M.D.  
*Instructor in Obstetrics and Gynecology* 2247 Cranford Road
- IRVING EMERY GRAY (1930), Ph.D.  
*Professor of Zoology* 124 Pinecrest Road
- ROBERT EARL GRAY (1950), M.M.  
*Visiting Instructor in Musical Theory and Band Direction* 814 Watts Street
- MAURICE H. GREENHILL (1940), M.D.  
*Associate Professor of Neuropsychiatry* Hope Valley
- EUGENE GREULING (1948), Ph.D.  
*Associate Professor of Physics* 2255 Cranford Road

\* Resigned, September 1, 1950.

† Resigned, January 31, 1951.

- KEITH SANFORD GRIMSON (1930-42; 1945), M.D.  
*Professor of Surgery* Hope Valley
- PAUL MAGNUS GROSS (1919), Ph.D.  
*William Howell Pegram Professor of Chemistry* Hope Valley
- \*JULIA REBECCA GROUT (1924), M.S.  
*Professor of Physical Education* 804 Fourth Street
- ROBERT BERGSTROM GUSTAFSON (1949), B.S., Lieutenant, U. S. Navy  
*Assistant Professor of Naval Science* 628 Club Boulevard
- HOWARD N. HAINES (1943), B.S.  
*Assistant Professor of General Engineering* 2307 Club Boulevard
- FRANK GREGORY HALL (1926-42; 1945), Ph.D.  
*Professor of Physiology* 122 Pinecrest Road
- †LOUISE HALL (1931), B.A., S.B. in Architecture, Brevet d'Art  
*Associate Professor of Architecture* Box 6636, College Station
- WILLIAM HOLLAND HALL (1915), A.M., M.S.C.E.  
*Professor of Engineering* 922 Urban Avenue
- JOHN HAMILTON HALLOWELL (1942), Ph.D.  
*Professor of Political Science* 2709 Augusta Drive
- EDWIN CROWELL HAMBLEN (1931), M.D.  
*Associate Professor of Obstetrics and Gynecology, and  
 Professor of Endocrinology* 810 Forest Hills Boulevard
- WILLIAM BASKERVILLE HAMILTON, JR. (1936), Ph.D.  
*Associate Professor of History* 2256 Cranford Road
- PHILIP HANDLER (1939), Ph.D.  
*Professor of Biochemistry and Nutrition* 2307 Sprunt Street
- FRANK ALLAN HANNA (1948), Ph.D.  
*Associate Professor of Economics* 2239 Cranford Road
- OSCAR CARL EDVARD HANSEN-PRÜSS (1930), M.D.  
*Professor of Medicine in Charge of Clinical Microscopy* Hope Valley
- EARL THOMAS HANSON (1946), Ph.D.  
*Assistant Professor of Political Science* Powe Apartments
- ‡WILLIAM MARION HARDY (1946), B.S. in M.E.  
*Instructor in Mechanical Engineering* Chapel Hill, N. C.
- GEORGE THOMAS HARGITT (1930), Ph.D., Sc.D.  
*Professor of Zoology* 811 Watts Street
- ELLWOOD SCOTT HARRAR (1936), Ph.D.  
*Professor of Wood Technology* 2228 Cranford Road
- ROBERT BRENT HARRELL (1950), A.B., Lieutenant Commander, U. S. Navy  
*Associate Professor of Naval Science* University Apartments
- GEORGE PARKER HARRIS (1932), A.B.  
*Instructor in Hospital Administration* Charlotte, N. C.
- JEROME SYLVAN HARRIS (1936), M.D.  
*Professor of Pediatrics, and Associate Professor of  
 Biochemistry* 1007 Rosehill Avenue
- HORNELL NORRIS HART (1938), Ph.D.  
*Professor of Sociology* Cranford Road

\* Absent on sabbatical leave, spring semester, 1950-51.

† Absent on sabbatical leave, 1950-51.

‡ Resigned, September 1, 1950.

- JULIAN DERYL HART (1930), M.D.  
*Professor of Surgery* Duke University Road
- GEORGE CORBIN HARWELL (1935; 1947), Ph.D.  
*Assistant Professor of English* Carolee Apartments
- HERMAN L. HASSELL (1950), R.T.  
*Technical Instructor in X-Ray Technology* Pickett Road
- CHARLES CLEVELAND HATLEY (1917), Ph.D.  
*Professor of Physics* 708 Buchanan Boulevard
- \*MARVIN THOMAS HATLEY, JR. (1946), B.S. in E.E.  
*Instructor in Electrical Engineering* Duke University
- CHARLES ROY HAUSER (1929), Ph.D.  
*Professor of Chemistry* 1020 Roschill Avenue
- DARRELL MONROE HEDGECOCK (1950), B.S., B.S. in E.E.  
*Instructor in Electrical Engineering* 315 West Trinity Avenue
- CAROLINE ELIZABETH HELMICK (1949), M.D.  
*Associate in Medicine and in Preventive Medicine and Public Health* East Campus
- JAMES PAISLEY HENDRIX (1938), M.D.  
*Assistant Professor of Medicine and Therapeutics* 144 Pinecrest Road
- \*BULFORD GILBERT HERBERT (1949), LL.M.  
*Acting Assistant Professor of Law* Guess Road
- STEPHEN DUNCAN HERON, JR. (1950), M.S.  
*Instructor in Geology* 311 Leon Street
- DUNCAN CHARTERIS HETHERINGTON (1930), Ph.D., M.D.  
*Professor of Anatomy* University Apartments
- JOSEPH S. HIATT, JR. (1949), M.D.  
*Instructor in Medicine* McCain, N. C.
- JOHN BAMBER HICKAM (1947), M.D.  
*Assistant Professor of Medicine* University Apartments
- FRANKLIN SIMPSON HICKMAN (1927), Ph.D., D.D.  
*Professor of Preaching and the Psychology of Religion* 921 West Markham Avenue
- ARTHUR OWEN HICKSON (1929), Ph.D.  
*Assistant Professor of Mathematics* 2712 Legion Avenue
- DOUGLAS GREENWOOD HILL (1931), Ph.D.  
*Associate Professor of Chemistry* Dixon Road
- JOSEPH MARTIN HITCH (1946), M.D.  
*Associate in Dermatology and Syphilology* Raleigh, N. C.
- MARCUS EDWIN HOBBS (1935), Ph.D.  
*Professor of Chemistry* 115 Pinecrest Road
- \*JOHN EDWARD HOFEN (1949), A.M.  
*Instructor in German* 2318 Hiron Circle
- LESLIE BENJAMIN HOIIMAN (1946), M.D.  
*Professor of Neuropsychiatry* 616 Ruby Street
- BERNARD CLEVELAND HOLLAND (1948), M.D.  
*Associate in Medicine* 711 Anderson Street
- RAY WALTER HOLLAND (1947), B.S. in M.E.  
*Instructor in Mechanical Engineering* 2528 Glendale Avenue
- IRVING BRINTON HOLLEY, JR. (1947), Ph.D.  
*Instructor in History* Duke University Apartments

\* Resigned, September 1, 1950.



FRANCES VIRGINIA LEE HOLTON (1947), M.A. <i>Assistant Professor of Physical Education</i>	Erwin Apartments
*CALVIN BRYCE HOOVER (1925), Ph.D., Litt.D. <i>Professor of Economics</i>	1702 Duke University Road
EDWARD CHARLES HORN (1946), Ph.D. <i>Assistant Professor of Zoology</i>	2509 Cascadilla Street
STEPHEN FRANCIS HORNE (1950), M.D. <i>Instructor in Dermatology and Syphilology</i>	Rocky Mount, N. C.
JAY BROADUS HUBBELL (1927), Ph.D. <i>Professor of American Literature</i>	121 Pinecrest Road
*DON DOUGAN HUMPHIREY (1945), Ph.D. <i>Professor of Economics</i>	2802 Legion Avenue
MRS. WANDA SANBORN HUNTER (1947), Ph.D. <i>Associate Professor of Zoology</i>	Faculty Apartments
ROBERT STILWELL HUNTING (1949), M.A. <i>Instructor in English</i>	St. Mary's Road
CARL A. HYLDBURG, JR. (1949), LL.B. <i>Instructor in Economics</i>	Alastair Apartments
THELMA INGLES (1950), R.N., M.A. <i>Assistant Professor of Nursing Education</i>	Piedmont Apartments
WILLIAM HENRY IRVING (1936), Ph.D. <i>Professor of English</i>	2707 Legion Avenue
CHARLES EDWIN IRWIN (1946), M.D. <i>Lecturer in Orthopaedic Surgery</i>	Duke Hospital
JAMES O. JACKSON (1950), M.D. <i>Instructor in Neuropsychiatry</i>	419 Hilton Avenue
JULIAN E. JACOBS (1936-38; 1947), M.D. <i>Lecturer in Orthopaedics</i>	819 Fourth Street
MCRAE JARRETT (1950), B.S. <i>Instructor in Electrical Engineering</i>	914 West Markham Avenue
FRANCES CAROLINE JEFFERS (1947), A.M. <i>Assistant Professor of Nursing Education</i>	Baker House
JAMES LEWIS JENKINS (1950), B.E.E., M.S.E. <i>Instructor in Electrical Engineering</i>	1212 B Street
MARIANNA DUNCAN JENKINS (1948), Ph.D. <i>Assistant Professor of Art</i>	2304 Cranford Road
HOWARD EIKENBERRY JENSEN (1931), Ph.D. <i>Professor of Sociology</i>	143 Pinecrest Road
FREDERICK CHARLES JOERG (1947), M.B.A. <i>Assistant Professor of Economics</i>	612 Club Boulevard
AMOS N. JOHNSON (1949), M.D. <i>Instructor in General Practice of Medicine</i>	Garland, N. C.
†MYCHYLE WELLINGTON JOHNSON (1937), Ph.D. <i>Associate Professor of Zoology</i>	106 Turrentine Road
‡BARNEY LEE JONES (1948), B.D. <i>Instructor in Biblical Literature</i>	820 Demerius Street

\* Absent on leave, spring semester, 1950-51.

† Died, September 25, 1950.

‡ Absent on leave, 1950-51.

- CARL CANDLER JONES, JR. (1950), M.D.  
*Instructor in Medicine* 2623 Lawndale Avenue
- CLAUDIUS PARKS JONES (1935), M.T.  
*Technical Research Instructor in Obsetrics and Gynecology* 2118 Cole Road
- ARCHIBALD CURRIE JORDAN (1925), A.M.  
*Assistant Professor of English* 147 Pinecrest Road
- BRADY RIMBEY JORDAN (1927), Ph.D.  
*Professor of Romance Languages* 117 Pinecrest Road
- HELEN LOUISE KAISER (1943), R P.T.  
*Associate in Physical Rehabilitation* 804 Fourth Street
- HENRY KAMIN (1948), Ph.D.  
*Instructor in Biochemistry* 2761 Guess Road
- SEYMOUR ROBERT KAPLAN (1950), M.D.  
*Associate in Neuropsychiatry* 1106 Alabama Avenue
- NANCY CATHERINE KEEVER (1950), Ph.D.  
*Visiting Instructor in Botany* 1512 North Duke Street
- WALTER KEMPNER (1934), M.D.  
*Associate Professor of Medicine* 1505 Virginia Avenue
- \*PHILIP EDWARD KENNEDY (1947), A.M.  
*Instructor in English* 611 Watts Street
- VAN LESLIE KENYON, JR. (1945), B.S.  
*Assistant Professor of Mechanical Engineering* Hillsboro, N. C.
- GRACE PARDRIDGE KERBY (1947), M.D.  
*Instructor in Medicine* Duke Hospital
- GEORGE WALLACE KERNODLE (1949), M.D.  
*Instructor in Pediatrics* Duke Hospital
- VERNON KINROSS-WRIGHT (1949), B.M. (Oxon.), D.P.M.  
*Associate in Neuropsychiatry* Box 79, Route 3
- WILLIAM KLENZ (1947), M.A.  
*Assistant Professor of Music* 1216 B Street
- \*SAMUEL KLIGER (1946), Ph.D.  
*Assistant Professor of English* Faculty Apartments
- WALTER GEORGE KLOPPER (1950), Ph.D.  
*Lecturer in Department of Psychology, and Psychologist in Department of Psychiatry* 2617 Acadia Street
- SIGMUND KOCH (1942-47; 1948), Ph.D.  
*Associate Professor of Psychology* 2921 Horton Road
- CLARENCE FERDINAND KORSTIAN (1930), Ph.D.  
*Professor of Silviculture* 4 Sylvan Road
- PAUL JACKSON KRAMER (1931), Ph.D.  
*Professor of Botany* 2251 Cranford Road
- ROBERT KRAMER (1947), I.L.B.  
*Professor of Law* Guess Road
- EDWARD K. KRAYBILL (1939), M.S.E.  
*Assistant Professor of Electrical Engineering* 900 Dacian Avenue
- GEORGE FREDERIC KUDER (1948), Ph.D.  
*Professor of Psychology* 2516 Perkins Road

\* Resigned, September 1, 1950.

EDWARD CHARLES KUNKLE (1948), M.D. <i>Assistant Professor of Medicine</i>	1302 Oakland Avenue
WESTON LABARRE (1946), Ph.D. <i>Associate Professor of Anthropology</i>	1311 Alabama Avenue
CHARLES EARL LANDON (1926), Ph.D. <i>Associate Professor of Economics</i>	1514 Edgevale Road
JOHN TATE LANNING (1927), Ph.D. <i>Professor of History</i>	Hope Valley
WILLIAM THOMAS LAPRADE (1909), Ph.D. <i>Professor of History</i>	1108 Monmouth Avenue
JOHN E. LARSH, JR. (1943), Sc.D. <i>Associate in Parasitology</i>	Duke Hospital
ELVIN REMUS LATTY (1937), J.D., J.Sc.D. <i>Professor of Law</i>	Hope Valley
*NATALIE L. LAVIN (1949), R.N. <i>Instructor in Pediatric Nursing</i>	1010 First Street
LEWIS LEARY (1941), Ph.D. <i>Professor of American Literature</i>	2106 Woodrow Street
†PAUL R. LEE (1948), M.A. <i>Instructor in English</i>	Epworth Inn
‡BENJAMIN FRANKLIN LEMERT (1930), Ph.D. <i>Associate Professor of Economic Geography</i>	123 Pinecrest Road
HAROLD WALTER LEWIS (1946), Ph.D. <i>Assistant Professor of Physics</i>	1005 Carolina Avenue
MARTHA MODENA LEWIS (1933), M.A. <i>Associate Professor of Physical Education and Dance</i>	Erwin Apartments
RALPH ELTON LEWIS (1941), M.S. in M.E. <i>Assistant Professor of General Engineering</i>	1401 Alabama Avenue
ROBERT GUILFORD LEWIS (1949), Ph.D. <i>Instructor in Romance Languages</i>	Alastair Apartments
CHARLES HARRIS LIVENGOOD, JR. (1946), LL.B. <i>Associate Professor of Law</i>	Hope Valley
MARIO LLERENA (1948), Doctor en Filosofía y Letras <i>Instructor in Romance Languages</i>	Duke University Apartments
ARTHUR HILL LONDON, JR. (1932), M.D. <i>Associate in Pediatrics</i>	Corner of Shepherd and Wells Streets
FREDERICK LONDON (1938), Ph.D., D. ès Sc. <i>Professor of Theoretical Chemistry</i>	1508 Oakland Avenue
WILLIAM F. LOVELL (1950), M.D. <i>Instructor in Medicine</i>	103 Club Boulevard
**HANS LÖWENBACH (1940), M.D. <i>Associate Professor of Neuropsychiatry</i>	Apex Road
CHARLES LUCIEN BAKER LOWNDES (1934), S.J.D. <i>Professor of Law</i>	2016 Club Boulevard
OSKAR HELGE LUNDHOLM (1930), Ph.D. <i>Professor of Psychology</i>	803 Second Street

\* Resigned, May 31, 1950.

† Resigned, September 1, 1950.

‡ Absent on sabbatical leave, fall semester, 1950-51.

\*\* Absent on leave, 1949-51.

- \*RICHARD SHIERMAN LYMAN (1940), M.D.  
*Professor of Neuropsychiatry* 812 Anderson Street
- ANGUS M. MCBRYDE (1931), M.D.  
*Associate Professor of Pediatrics* 410 Forest Hills Boulevard
- JOHN P. MCBRYDE (1950), Ph.D., Major, U. S. Air Force  
*Assistant Professor of Air Science* 2524 State Street
- JOSEPH ADOLPHUS MCCLAIN, JR. (1950), J.S.D., LL.D.  
*Professor of Law* 2021 Myrtle Drive
- MARY THOMPSON MCCORMIC (1950), M.A.  
*Visiting Instructor in Health Education* Faculty Apartments
- JOSEPH MCCrackEN (1946), M.D.  
*Instructor in Medicine* 126 Pinecrest Road
- FORREST DRAPER MCCREA (1930), Ph.D.  
*Associate Professor of Physiology and Pharmacology* 1023 Demerius Street
- MALCOLM MCDERMOTT (1930), LL.B.  
*Professor of Law* Orange County, N. C.
- GELOLO MCHUGH (1946), Ph.D.  
*Assistant Professor of Psychology* Erwin Road
- FRED HENRY MACINTOSH (1947; 1950), M.A.  
*Visiting Instructor in English* Chapel Hill, N. C.
- \*LIONEL WILFRED MCKENZIE, JR. (1948), M.A.  
*Assistant Professor of Economics* Alastair Apartments
- †FURMAN GORDON McLARTY (1933), Ph.D.  
*Associate Professor of Philosophy* 1511 Page Street
- CLARENCE MCCAIN McMURRAY (1950), M.D.  
*Instructor in Medicine* 821 Demerius Street
- SAMUEL D. MCPHERSON, JR. (1949), M.D.  
*Instructor in Ophthalmology* 1520 Hermitage Court
- DOUGLAS BLOUNT MAGGS (1930), J.D., S.J.D.  
*Professor of Law* Hope Valley
- WILLIAM WAILES MAGRUDER (1948), M.D.  
*Instructor in Neuropsychiatry* Duke Hospital
- ALAN KREBS MANCHESTER (1929), Ph.D.  
*Professor of History* 2016 Myrtle Drive
- PAUL FRANKLIN MANESS (1949), M.D.  
*Instructor in Pediatrics* Duke Hospital
- EVERETT JAMES MANN (1950), M.B.A., C.P.A.  
*Associate Professor of Economics* 1712 Roxboro Road
- LAWRENCE FREDERICK MANSFIELD (1949), M.A.  
*Instructor in Economics* 1324 Vickers Avenue
- GEORGE MARGOLIS (1947), M.D.  
*Assistant Professor of Pathology* 2308 Pratt Street
- JOSEPH ELDRIDGE MARKEE (1943), Ph.D.  
*Professor of Anatomy* 1015 Demerius Street
- SIDNEY DAVID MARKMAN (1947), Ph.D.  
*Assistant Professor of Art* Duke University Apartments
- MRS. ELSIE W. MARTIN (1930), M.S.  
*Professor of Dietetics* Faculty Apartments

\* Absent on leave, 1950-51.

† Absent on sabbatical leave, spring semester, 1950-51.

- MRS. RUTH CAMPBELL MARTIN (1944), M.D.  
*Assistant Professor of Surgery in charge of Anesthesiology* 113 Pinecrest Road
- SAMUEL PRESTON MARTIN (1949), M.D.  
*Associate in Medicine and in Bacteriology* 113 Pinecrest Road
- \*VANCE BACON MARTIN (1949), B.S. in E.E.  
*Visiting Instructor in Electrical Engineering* Hillsboro, N. C.
- \*CAROLYN P. MASON (1949), B.S.  
*Instructor in Physical Education* Faculty Apartments
- LUCY ETHELYN MASSEY (1949), R.N., M.A.  
*Assistant Professor of Public Health Nursing* Baker House
- \*A. MINETTA MATTHEWS (1947), M.A.  
*Instructor in Romance Languages* Faculty Apartments
- MRS. ANNE POWELL MATTHIAS (1950), M.S.  
*Instructor in Physical Education* Chapel Hill, N. C.
- WILLIAM CARY MAXWELL (1930), Ph.D.  
*Assistant Professor of German* 142 Pinecrest Road
- OTTO MEIER, JR. (1934), B.S. in E.E., M.S., E.E.  
*Associate Professor of Electrical Engineering* 916 Monmouth Avenue
- ELIJAH EUGENE MENEFEY, JR. (1940), M.D.  
*Assistant Professor of Medicine* 2205 Cranford Road
- M. VICTOR MICHALAK (1950), A.M.  
*Instructor in Speech* 614 North Gregson Street
- OSCAR LEE MILLER (1946), M.D.  
*Lecturer in Orthopaedic Surgery* Charlotte, N. C.
- FRANK KIRBY MITCHELL (1926), A.M.  
*Associate Professor of English* 619 Swift Avenue
- WILFRIED F. H. M. MOMMAERTS (1948), Ph.D.  
*Lecturer in Biochemistry* 411 Francis Street
- JAMES DONALDSON MOODY (1948), M.D.  
*Associate in Surgery* 2708 Legion Avenue
- \*RALPH PIERPONT MORGAN, JR. (1946), B.S. in M.E.  
*Instructor in Mechanical Engineering* 910 Sixth Street
- LOUISE G. MOSER (1949), R.N., M.N.  
*Assistant Professor of Nursing Education* 1004 Markham Avenue
- EARL GEORGE MUELLER (1945), B.M., A.M., M.F.A.  
*Assistant Professor of Art* 1212 Virginia Avenue
- MRS. JULIA WILKINSON MUELLER (1939-41; 1946), M.A.  
*Assistant Professor of Music* 1212 Virginia Avenue
- RICHARD J. F. MURPHY (1948), M.D., C.M.  
*Instructor in Medicine* 1203 Ruffin Street
- WILLIAM D. MURRAY (1951), B.A.  
*Head Football Coach* Duke University
- HIRAM EARL MYERS (1926), S.T.M., D.D.  
*Professor of Biblical Literature* 141 Pinecrest Road
- JACK DUANE MYERS (1947), M.D.  
*Assistant Professor of Medicine* 713 Anderson Street
- †HELEN NAHM (1946), R.N., Ph.D.  
*Professor of Nursing Education* Faculty Apartments

\* Resigned, September 1, 1950.

† Absent on leave, 1950-51.



GLENN ROBERT NEGLEY (1946), Ph.D. <i>Professor of Philosophy</i>	1700 Shawnee Street
ERNEST WILLIAM NELSON (1926), Ph.D. <i>Associate Professor of History</i>	2217 Club Boulevard
*HANS NEURATH (1938), Ph.D. <i>Professor of Physical Biochemistry</i>	2505 Club Boulevard
MRS. DOROTHY RUTH FRANCE NEWCOMER (1949), M.S. <i>Instructor in Physical Education</i>	816 Buchanan Boulevard
HENRY WINSTON NEWSON (1948), Ph.D. <i>Professor of Physics</i>	111 North Gregson Street
WILLIAM MCNEAL NICHOLSON (1935), M.D. <i>Associate Professor of Medicine</i>	824 Anderson Street
WALTER MCKINLEY NIELSEN (1925) Ph.D. <i>Professor of Physics</i>	139 Pinecrest Road
†LOTHAR WOLFGANG NORDHEIM (1937), Ph.D. <i>Professor of Physics</i>	2255 Cranford Road
GUY LEARY ODOM (1943), M.D. <i>Associate Professor of Neurosurgery</i>	Hope Valley
*JOHN A. OHLSON (1947), M.A. <i>Instructor in Psychology</i>	Garrett Road
HENRY JOHN OOSTING (1932), Ph.D. <i>Professor of Botany</i>	2642 University Drive
‡HARRY BARRON O'REAR (1948), M.D. <i>Associate in Pediatrics</i>	1106 Alabama Avenue
EDWARD STEWART ORGAIN (1934), M.D. <i>Associate Professor of Medicine</i>	Hope Valley
EFFIE MARIE OSTERMAN (1950), R.N., M.A. <i>Assistant Professor of Nursing Education</i>	1102 Monmouth Avenue
AUBREY EDWIN PALMER (1944), B.S. in Engr., C.E. <i>Assistant Professor of Civil Engineering</i>	2519 State Street
LEONARD PALUMBO (1950), M.D. <i>Instructor in Obstetrics and Gynecology</i>	1116 Ninth Street
HAROLD TALBOT PARKER (1939), Ph.D. <i>Assistant Professor of History</i>	Glenn Apartments
KARL BACHMAN PATTERSON (1920), A.M. <i>Assistant Professor of Mathematics</i>	1024 Monmouth Avenue
ROBERT LEET PATTERSON (1945), Ph.D. <i>Professor of Philosophy</i>	104 West Forest Hills Boulevard
LEWIS PATTON (1926), Ph.D. <i>Associate Professor of English</i>	614 Swift Avenue
LELA MELISSA PAYNE (1947), M.A. <i>Instructor in Physical Education</i>	Faculty Apartments
RICHARD L. PEARSE (1938), M.D. <i>Instructor in Obstetrics and Gynecology</i>	1325 Arnette Avenue
TALMADGE LEE PEELE (1939), M.D. <i>Associate Professor of Anatomy, and Associate in Medicine</i>	University Apartments

\* Resigned, September 1, 1950.

† Absent on leave, 1950-51.

‡ Resigned, January 1, 1950.

- \*JOHN DEJARNETTE PEMBERTON, JR. (1947), LL.B.  
*Associate Professor of Law* 1920 Ward Street
- KENNETH E. PENROD (1950), Ph.D.  
*Associate Professor of Physiology and Pharmacology* 809 Demerius Street
- EDMUND FRANKLIN PERRY (1950), Ph.D.  
*Instructor in Religion* 1024 Monmouth Avenue
- HAROLD SANFORD PERRY (1932), Ph.D.  
*Associate Professor of Botany* 2302 Cranford Road
- ELBERT LAPSLEY PERSONS (1930), M.D.  
*Assistant Professor of Medicine, and Associate Professor of  
 Preventive Medicine and Public Health* 723 Anderson Street
- RAY C. PETRY (1937), Ph.D., LL.D.  
*Professor of Church History* 128 Pinecrest Road
- JOHN BERNARD PFEIFFER, JR. (1949), M.D.  
*Associate in Medicine* University Apartments
- JAMES HENRY PHILLIPS (1946), Ph.D.  
*Assistant Professor of Biblical Literature* 2517 Perkins Road
- RICHARD H. PHILLIPS (1950), M.D.  
*Associate in Neuropsychiatry* 2515 Pickett Road
- MARSHALL IVEY PICKENS (1932), M.A.  
*Instructor in Hospital Administration* Charlotte, N. C.
- HENRY FLOYD PICKETT (1935), A.B.  
*Instructor in Medical Art and Illustration* 2506 Cornwallis Road
- KENNETH LEROY PICKRELL (1944), M.D.  
*Professor of Plastic Surgery* 3 Sylvan Road
- IRVING PINE (1949), M.D.  
*Associate in Neuropsychiatry* 1701 Englewood Avenue
- KENNETH A. PODGER (1949), M.D.  
*Instructor in Obstetrics and Gynecology* 217 Markham Street
- HILDA PERSONS POPE (1948), Ph.D.  
*Associate in Bacteriology* Erwin Apartments
- FRANCIS ROSS PORTER (1930), A.B.  
*Superintendent of the Hospital and Associate Professor of Hospital  
 Administration* Hillsboro, N. C.
- MARY ALVERTA POSTON (1930), A.M.  
*Instructor in Bacteriology* 512 Watts Street
- MARY POTEAT (1935), Ph.D.  
*Assistant Professor of English* Faculty Apartments
- BENJAMIN E. POWELL (1946), Ph.D.  
*Librarian* 626 Swift Avenue
- CHARLES E. PRALL (1949), Ph.D.  
*Visiting Lecturer in Hospital Administration* Greensboro, N. C.
- LANIER WARD PRATT (1940), M.A.  
*Instructor in Romance Languages* 2007 Ruffin Street
- RICHARD LIONEL PREDMORE (1945-46; 1950), D.M.L.  
*Professor of Romance Languages* 2413 Perkins Road
- †ARTHUR MARCUS PROCTOR (1923), Ph.D.  
*Professor of Education* 2106 Myrtle Drive

\* Resigned, September 1, 1950.

† Absent on sabbatical leave, spring semester, 1950-51.

- \*ALLEN D. PUPPEL (1949), M.D.  
*Associate in Urology* 1500 Ruffin Street
- JAMES MINETREE PYNE (1949), B.S.  
*Instructor in Hospital Administration* 1832 Forest Road
- †MAX RADIN (1949), Ph.D., LL.D.  
*Visiting Professor of Law* Duke University
- JACKSON V. RAMBEAU (1949), Ph.B., Lieutenant Colonel, U. S. Air Force  
*Assistant Professor of Air Science* 2421 Perkins Road
- RICHARD BEVERLY RANEY (1934), M.D.  
*Assistant Professor of Orthopaedic Surgery* 1110 Shepherd Street
- ROBERT STANLEY RANKIN (1927), Ph.D.  
*Professor of Political Science* 1107 Knox Street
- WATSON SMITH RANKIN (1932), M.D., D.Sc.  
*Visiting Lecturer in Hospital Administration* Charlotte, N. C.
- ‡WILLIAM WALTER RANKIN, JR. (1926), M.A.  
*Professor of Mathematics* 1011 Gloria Avenue
- EDWARD SHORE RAPER (1934), A.B.  
*Instructor in Hospital Administration* 2317 Club Boulevard
- \*\*BENJAMIN ULYSSES RATCHFORD (1928), Ph.D.  
*Professor of Economics* 133 Pinecrest Road
- ALBERT E. RAUH (1949), M.D.  
*Associate in Neurology* Roanoke, Va.
- LEONARD J. RAVITZ (1950), M.D.  
*Instructor in Neuropsychiatry* Duke Hospital
- ISRAEL THOMAS REAMER (1931), Ph.G.  
*Instructor in Pharmacy* 2114 Woodrow Street
- KENNETH JAMES REARDON (1947), A.M.  
*Assistant Professor of English* 2610 Duke Homestead Road
- FREDERICK JEROME REED (1935), M.E., M.S.  
*Associate Professor of Mechanical Engineering* 2203 Englewood Avenue
- ENNIS SAMUEL REES (1949), M.A.  
*Instructor in English* 1813 Hillcrest Drive
- ROBERT JAMES REEVES (1930), M.D.  
*Professor of Radiology* 920 Anderson Street
- ††MRS. WALLY REICHENBERG-HACKETT (1946), Ph.D.  
*Assistant Professor of Psychology* Erwin Road
- FREDERICK P. RENKEN (1950), B.S., Captain, U. S. Air Force  
*Assistant Professor of Air Science* 2523 State Street
- ‡‡THOMAS EUGENE RENTZ (1949), B.A.  
*Instructor in Romance Languages* Duke University
- JOSEPH BANKS RHINE (1927), Ph.D.  
*Director of Parapsychology Laboratory* 908 Club Boulevard
- CLAUDE HENRY RICHARDS, JR. (1946), Ph.D.  
*Assistant Professor of Political Science* 1407 North Gregson Street
- ‡‡ANNETTE S. RIDER (1949), R.N., B.S.  
*Instructor in Obstetrical Nursing* 915 Chester Street

\* Resigned, January 1, 1951.

† Died, June 22, 1950.

‡ Absent on sabbatical leave, fall semester, 1950-51.

\*\* Absent on leave, fall semester, 1950-51.

†† Absent on leave, spring semester, 1950-51.

‡‡ Resigned, September 1, 1950.

- \*J. ALBERT ROBBINS, JR. (1946), Ph.D.  
*Instructor in English* Faculty Apartments
- JOSEPH CLARKE ROBERT (1938), Ph.D.  
*Professor of History* 1102 B Street
- HENRY STOUTIE ROBERTS, JR. (1948), Ph.D.  
*Assistant Professor of Zoology* Duke Homestead Road
- JOHN HENDERSON ROBERTS (1931), Ph.D.  
*Professor of Mathematics* 2813 Legion Avenue
- †LOUIS CARROLL ROBERTS (1933), M.D.  
*Instructor in Urology* 600 North Gregson Street
- WILLIAM M. ROBERTS (1950), M.D.  
*Lecturer in Orthopaedics* Gastonia, N. C.
- ELIOT H. RODNICK (1949), Ph.D.  
*Professor of Psychology, and Director of Clinical Training* 2806 Legion Avenue
- ROBERT SAMUEL ROGERS (1937), Ph.D., F.A.A.R.  
*Professor of Latin and Roman Studies* 148 Pinecrest Road
- THEODORE ROPP (1938), Ph.D.  
*Associate Professor of History* 302 Woodridge Drive
- JESSE LEE ROSE (1936), Ph.D.  
*Assistant Professor of Latin and Greek* East Campus
- NORMAN F. ROSS (1937), D.D.S.  
*Instructor in Dentistry* Hope Valley
- ROBERT ALEXANDER ROSS (1930), M.D.  
*Professor of Obstetrics and Gynecology* 818 Anderson Street
- DONALD F. ROY (1950), A.M.  
*Instructor in Sociology* 323 East Trinity Avenue
- MARVIN PIERCE RUCKER (1941), M.D., LL.D.  
*Lecturer in Obstetrics and Gynecology* Richmond, Va.
- JOHN JESSE RUDIN, II (1945), Ph.D.  
*Assistant Professor of Speech* 2122 Englewood Avenue
- \*WALTER RUDIN (1949), Ph.D.  
*Instructor in Mathematics* Duke University
- MABEL F. RUDISILL (1948), Ph.D.  
*Associate Professor of Education* Guess Road
- VICTOR JOHN RUDOLPH (1948), D.F.  
*Assistant Professor of Forest Management* 617 Swift Avenue
- JULIAN MEADE RUFFIN (1930), M.D.  
*Professor of Medicine* 816 Anderson Street
- RALPH WAYNE RUNDLES (1945), Ph.D., M.D.  
*Assistant Professor of Medicine* 132 Pinecrest Road
- \*HOWARD W. RUNKEL (1949), M.A.  
*Instructor in English* 1408 Duke University Road
- REAMES HAWTHORNE SALES (1949), B.D.  
*Instructor in Religion* Duke University Apartments
- MURIEL IONE SANDEEN (1950), Ph.D.  
*Instructor in Zoology* 804 Fourth Street
- CHARLES RICHARD SANDERS (1937), Ph.D.  
*Associate Professor of English* 103 Pinecrest Road

\* Resigned, September 1, 1950.

† Resigned, January 1, 1951.

MRS. EUGENIA CURTIS SAVILLE (1947), M.A. <i>Assistant Professor of Music</i>	Duke University Apartments
LLOYD BLACKSTONE SAVILLE (1946), Ph.D. <i>Assistant Professor of Economics</i>	Duke University Apartments
CHARLES HENRY SAWYER (1944), Ph.D. <i>Professor of Anatomy</i>	2119 Englewood Avenue
JOHN HENRY SAYLOR (1928), Ph.D. <i>Professor of Chemistry</i>	707 Club Boulevard
*WILSON GEORGE SCANLON (1949), M.D. <i>Associate in Neuropsychiatry</i>	615 Ruby Street
THOMAS ANTON SCHAFER (1950), B.D. <i>Assistant Professor of Historical Theology</i>	1819 Hillcrest Drive
†PERITZ SCHEINBERG (1949), M.D. <i>Instructor in Medicine</i>	227 Dacian Avenue
CLARENCE HENRY SCHETTLE (1946), Ph.D. <i>Associate Professor of Sociology</i>	119 Pinecrest Road
HERMAN MAX SCHIEBEL (1939), M.D. <i>Associate in Surgery</i>	1410 Pennsylvania Avenue
JAMES F. SCHIEVE (1949), D.V.M., M.D. <i>Instructor in Medicine</i>	2312 Wilson Street
FREDERICK KENNETH SCHMIDT (1947), M.D. <i>Instructor in Urology</i>	1927 Ward Street
FRANCIS XAVIER SCHUMACHER (1937), B.S. <i>Professor of Forestry</i>	6 Sylvan Road
THEODORE B. SCHWARTZ (1948), M.D. <i>Associate in Medicine</i>	Carolee Apartments
‡ESTHER LOUISE SCHWERMEN (1947), M.A. <i>Assistant Professor of Speech</i>	1020 Urban Avenue
GEORGE WILLIAM SCHWERT, JR. (1946), Ph.D. <i>Assistant Professor of Biochemistry</i>	615 Colgate Street
WILL CAMP SEALY (1946), M.D. <i>Assistant Professor of Surgery</i>	919 Monmouth Avenue
WALTER JAMES SEELEY (1925), E.E., M.S. <i>Professor of Electrical Engineering</i>	1005 Urban Avenue
LEE GOODRICH SEWALL (1949), M.D. <i>Assistant Professor of Neuropsychiatry</i>	Roanoke, Va.
DAVID GORDON SHARP (1939), Ph.D. <i>Assistant Professor of Biophysics in Experimental Surgery, and Biophysicist to Duke Hospital</i>	202 Francis Street
LAMBERT ARMOUR SHEARS (1927), Ph.D. <i>Associate Professor of German</i>	917 Green Street
MILDRED MARGUERITE SHFRWOOD (1930), R.N. <i>Instructor in Pediatrics</i>	Baker House
JOHN HERMAN SHIELDS (1926), A.M. <i>Associate Professor of Accounting</i>	1315 Vickers Avenue
WILLIAM WARNER SHINGLETON (1947), M.D. <i>Associate in Surgery</i>	Alastair Apartments

\* Resigned July 1, 1950.

† Resigned, June 30, 1950.

‡ Absent on leave, fall semester, 1950-51.



- \*CHARLES K. SIBLEY (1949), M.A., M.F.A.  
*Instructor in Art* 704 Holloway Street
- ZACHARIAH S. SIKES, JR. (1950), M.D.  
*Associate in Neuropsychiatry* Duke Hospital
- JOSEPH ANDREW SILVA (1950), A.M.  
*Instructor in Mathematics* Creedmoor, N. C.
- GEORGE A. SILVER (1946), M.D.  
*Associate in Neuropsychiatry* 2005 Arbor Street
- SEYMOUR BERTRAM SILVERMAN (1950), M.D.  
*Instructor in Pathology* 2724 Stuart Drive
- EDWARD CHRISTIAN SIMMONS (1947), Ph.D.  
*Professor of Economics* 2510 Perkins Road
- WILLIAM HAYS SIMPSON (1930), Ph.D.  
*Associate Professor of Political Science* 1406 Dollar Avenue
- WILLIAM VANCE SINGLETARY (1948), M.D.  
*Instructor in Medicine* 2018 Sprunt Street
- MARY CLYDE SINGLETON (1950), B.S., R.P.T.  
*Instructor in Physical Therapy* 2039 Englewood Avenue
- BENJAMIN SMITH SKINNER (1946), M.D.  
*Instructor in Pediatrics* 403 Jackson Street
- \*GRIMES GIBBONS SLAUGHTER (1948), B.S. in E.E.  
*Instructor in Electrical Engineering* 1003 Green Street
- JAMES MATTHEW SLAY (1946), M.A.  
*Instructor in Education* 1222 Arnette Avenue
- DAVID TILLERSON SMITH (1930), M.D., Litt.D.  
*Professor of Bacteriology, and Associate Professor in Medicine* Hope Valley
- DOROTHY MARY SMITH (1950), R.N., M.Ed.  
*Assistant Professor of Nursing Education, and Director,  
Division of Nursing Education* 205 Cornwallis Road
- HILRIE SHELTON SMITH (1931), Ph.D., D.D., Litt.D.  
*Professor of American Religious Thought* 1523 Hermitage Court
- PRESTON WILLIAM SMITH (1950)  
*Technical Instructor in Hematology* 1401 Canterbury Circle
- ROBERT SIDNEY SMITH (1932), Ph.D.  
*Professor of Economics* 2236 Cranford Road
- MRS. SUSAN GOWER SMITH (1930), M.A.  
*Associate in Nutrition* Hope Valley
- WILLIAM VICK SMITH (1946), Ph.D.  
*Associate Professor of Physics* 1208 Dwire Place
- MARY HELEN SNIVELY (1930), M.A., A.N.A.  
*Instructor in Anesthesiology* 2913 Horton Road
- WILLIAM BREWSTER SNOW (1948), B.S. in C.E., M.S., Sc.D.  
*Associate Professor of Civil Engineering* 1022 West Trinity Avenue
- MRS. BESSIE WHITTET SPENCE (1929), A.M.  
*Assistant Professor of Biblical Literature* Hope Valley
- HERSEY EVERETT SPENCE (1918), B.D., D.D., Litt.D.  
*Professor of Biblical Literature and Religious Education* Hope Valley

\* Resigned, September 1, 1950.

- JOSEPH JOHN SPENGLER (1934), Ph.D.  
*Professor of Economics* 2240 Craunford Road
- HERTHA D. E. SPONER (1935), Ph.D.  
*Professor of Physics* Hope Valley
- DALE FISHER STANSBURY (1946), J.S.D. 1008 West Trinity Avenue  
*Professor of Law, and Faculty Director of Law Library*
- HELEN STARKE (1948), M.D.  
*Associate in Medicine* Cole Mill Road
- EUGENE ANSON STEAD, JR. (1947), M.D.  
*Florence McAlister Professor of Medicine* 2122 Myrtle Drive
- CHARLES RONALD STEPHEN (1950), M.D.C.M.  
*Associate Professor of Anesthesiology* 1509 Carolina Avenue
- HARRY R. STEVENS (1947), Ph.D.  
*Assistant Professor of History* University Apartments
- WILLIAM FRANKLIN STINESPRING (1936), Ph.D.  
*Professor of Old Testament* 1107 Watts Street
- JOSEPH HAROLD ST. JOHN, JR. (1949), M.D.  
*Instructor in Medicine* Creedmoor, N. C.
- FREDERICK WILLIAM STOCKER (1943), M.D.  
*Associate Professor of Ophthalmology* 1124 Forest Hills Boulevard
- LELAND DOUGLAS STODDARD (1947), M.D.  
*Associate in Pathology* 1406 Duke University Road
- EDWARD STONE (1949), Ph.D.  
*Instructor in English* 818 Sixth Street
- HARRIETTE STRIPLING (1950), Doctor de L'université  
*Visiting Instructor in Romance Languages* 715 Burch Avenue
- HOWARD AUSTIN STROBEL (1948), Ph.D.  
*Instructor in Chemistry* West Campus
- WIPPERT ARNOT STUMPF (1948), Ph.D.  
*Associate Professor of Education* 127 Pinecrest Road
- CHARLES WOODROW STYRON (1946), M.D.  
*Associate in Medicine* Duke Hospital
- HERBERT WILFRID SUGDEN (1929), Ph.D.  
*Assistant Professor of English* University Apartments
- ROBERT BURKE SUIT (1940), M.D.  
*Assistant Professor of Neuropsychiatry* 1131 Dollar Avenue
- EDWARD THOMAS SULLIVAN (1950), M.F.  
*Visiting Instructor in Forest Economics* 1105 Virginia Avenue
- ELIZABETH READ SUNDERLAND (1939-42; 1943), Ph.D.  
*Assistant Professor of Art* Alastair Apartments
- GEORGE FRASER SUTHERLAND (1948), M.D.  
*Associate Professor of Neuropsychiatry* Forest Hills Boulevard
- LOUIS EARL SWANSON (1949), A.B.  
*Instructor in Hospital Administration* 2610 Shenandoah Avenue
- MRS. MARTHA GRACY SWASEY (1946), M.A.  
*Assistant Professor of Physical Education* Duke University Apartments
- BYRON R. SWITZER (1949), B.S., Colonel, U. S. Air Force  
*Professor of Air Science* 2402 Chapel Hill Road

- \*CHARLES SACKETT SYDNOR (1936), Ph.D., Litt.D.  
*Professor of History* 116 Pinecrest Road
- †HARVEY GRANT TAYLOR (1940), M.D.  
*Associate Professor of Pediatrics and Bacteriology, and Assistant Dean of Medical School* Hillsboro, N. C.
- HAYWOOD MAURICE TAYLOR (1930), Ph.D. 2620 University Drive  
*Associate Professor of Biochemistry, and Professor of Toxicology*
- JOSEPH MILLER THOMAS (1930), Ph.D.  
*Professor of Mathematics* 2215 Cranford Road
- WALTER LEE THOMAS, JR. (1932-35; 1937-42; 1945), M.D.  
*Associate Professor of Obstetrics and Gynecology* Hope Valley
- ‡EDGAR TRISTRAM THOMPSON (1935), Ph.D.  
*Professor of Sociology* 138 Pinecrest Road
- FREDERICK A. THOMPSON, JR. (1950), M.D.  
*Instructor in Medicine* 2510 Shenandoah Avenue
- \*\*ROY BERTRAND THOMSON (1938), Ph.D.  
*Professor of Forest Economics* 2243 Cranford Road
- MARTIN BICE TRAVIS, JR. (1949), Ph.D.  
*Assistant Professor of Political Science* 1405 Watts Street
- JAMES NARDIN TRUESDALE (1930), Ph.D.  
*Assistant Professor of Greek* Faculty Apartments
- MRS. VIOLET HORNER TURNER (1943), M.D.  
*Instructor in Obstetrics and Gynecology* 2106 Cole Road
- ††LUELLA JANE UHRHANE (1947), R.N., B.S.  
*Instructor in Health Education* Erwin Apartments
- ††CHARLES ROWE VAIL (1939), B.S. in E.E., M.S. (E.E.)  
*Assistant Professor of Electrical Engineering* 900 Dacian Avenue
- CLYDE J. VAN ARSDALL, JR. (1948), B.S., Commander, U. S. Navy  
*Associate Professor of Naval Science* 421 Carolina Circle
- CLEMENT VOLLMER (1926), Ph.D.  
*Professor of German* 2114 Myrtle Drive
- HERBERT VON BECKERATH (1935), Ph.D.  
*Professor of Economics and Political Science* Hope Valley
- WARREN CHASE VOSBURGH (1928), Ph.D.  
*Professor of Chemistry* 2319 Englewood Avenue
- CARL M. VOYLES, JR. (1950), M.D.  
*Instructor in Medicine* 1112 Buchanan Boulevard
- ALBERT EDWARD WACKERMAN (1938), M.F.  
*Professor of Forest Utilization* Hope Valley
- ††WILLIAM WALLACE WADE (1931), A.B.  
*Head Coach of Football* 2022 Myrtle Drive
- \*\*\*FRED REESE WAGNER (1950), M.A.  
*Instructor in English* 905 Second Street
- JAMES ELIAS WALTER (1950), I.A.  
*Instructor in Economics* 508 East Geer Street

\* Absent on sabbatical leave, 1950-51.

† Absent on leave, 1949-51.

‡ Absent on sabbatical leave, spring semester, 1950-51.

\*\* Died, July 28, 1950.

†† Absent on leave, 1950-51.

‡‡ Resigned, January 1, 1951.

\*\*\* Resigned, February 1, 1951.

- ARLEY JOHN WALTON (1948), B.S.L., D.D.  
*Associate Professor of Practical Theology, and Director of Field Work* 815 Third Street
- LORING BAKER WALTON (1929), Lic. ès L., Ph.D.  
*Professor of Romance Languages* 2235 Cranford Road
- PAUL K. S. WANG (1950), D.Sc.  
*Visiting Professor of Physics* 2401 Cranford Road
- CHARLES EUGENE WARD (1927), Ph.D.  
*Associate Professor of English* 2429 Perkins Road
- JOHN RUSH WARREN (1946), Ph.D.  
*Instructor in Botany* 2002 Ruffin Road
- WILLIAM THURMAN WATKINS, JR. (1950), M.D.  
*Instructor in Dermatology and Syphilology* 2509 Glendale Avenue
- GEORGE ARCHIBALD WATSON (1950), M.D.  
*Instructor in Pediatrics* 2018 Sunset Avenue
- RICHARD LYNNESS WATSON, JR. (1939), Ph.D.  
*Assistant Professor of History* 109 Pinecrest Road
- VERNON ELGIN WAY (1930), A.M., M.A.  
*Assistant Professor of Greek* 918 Urban Avenue
- BAILEY DANIEL WEBB (1949), M.D., Ph.D.  
*Instructor in Pediatrics* 317 West Trinity Avenue
- KENNETH D. WEEKS (1947), M.D.  
*Instructor in Medicine* University Apartments
- HENRY WEITZ (1950), Ed.D.  
*Associate Professor of Education* 517½ South Duke Street
- PAUL WELSH (1948), Ph.D.  
*Assistant Professor of Philosophy* Faculty Apartments
- JOSEPH CABLE WETHERBY (1947), M.A.  
*Assistant Professor of Speech* 2306 Prince Street
- \*GEORGE WILLARD WHARTON, JR. (1939), Ph.D.  
*Associate Professor of Zoology* 1202 Oval Drive
- JOSEPH WARREN WHITE (1946), M.D.  
*Lecturer in Orthopaedic Surgery* Duke Hospital
- MRS. MARIE ANNE UPDIKE WHITE (1930), A.M.  
*Assistant Professor of English* 107 Pinecrest Road
- MRS. EUGENIA LEA REMELIN WHITRIDGE (1947), Ph.D.  
*Assistant Professor of Sociology* Cornwallis Road
- ALBAN GREGORY WIDGERY (1930), M.A.  
*Professor of Philosophy* 152 Pinecrest Road
- RUTH JANET WIEN (1949), M.S.  
*Associate in Medical Social Service* University Apartments
- THOMAS G. WIENER (1948), Ph.D.  
*Assistant Professor of Russian Language and Literature* 1808 Hillcrest Drive
- KARL MILTON WILBUR (1946), Ph.D.  
*Professor of Zoology* 3409 Chapel Hill Road
- LESLIE CLIFFORD WILBUR (1949), B.S., M.S.  
*Instructor in Mechanical Engineering* 1208 East Geer Street
- RALPH SYDNEY WILBUR (1933), B.S. in M.E., M.E.  
*Professor of Mechanical Engineering* 1018 Demerius Street

\* Absent on sabbatical leave, 1950-51.

- \*JESSE HOLLAND WILDER (1948), B.S. in M.E., M.S.  
*Instructor in General Engineering* 2219 Club Boulevard
- PELHAM WILDER, JR. (1949), Ph.D.  
*Instructor in Chemistry* 2325 Farthing Street
- WILLIAM EDGAR WILKINSON (1949), M.D.  
*Professor of Military Science and Tactics, and Associate in Neuropsychiatry* 1204 Ruffin Street
- D. MCGREGOR WILLIAMS (1947), B.S.  
*Lecturer in Preventive Medicine and Public Health* 1107 Alabama Avenue
- JAMES WESLEY WILLIAMS (1937), A.B., B.S. in C.E., M.S.  
*Assistant Professor of Civil Engineering* 206 Swift Avenue
- PHILLIP WILLIAMS, JR. (1949), Ph.D.  
*Assistant Professor of English* Faculty Apartments
- FLORENCE KISSICK WILSON (1946), R.N., M.A.  
*Professor of Nursing Education* Faculty Apartments
- FREDERICK ELIPHAZ WILSON (1923), A.M.  
*Associate Professor of German* 1020 Demerius Street
- †MARDIS GLEN WILSON, JR. (1949), M.A.  
*Instructor in English* 905 Second Street
- ROBERT RENBERT WILSON (1925), Ph.D., LL.D.  
*Professor of Political Science, and Lecturer in International Law* 717 Anderson Street
- WILLIAM PRESTON WILSON (1950), M.D.  
*Instructor in Neuropsychiatry* Fayetteville Road
- LOREN RALPH WITTIERS (1949), M.S.  
*Assistant Professor of Music* Duke University Apartments
- FREDERICK ADOLPHUS WOLF (1927), Ph.D.  
*Professor of Botany* 924 Urban Avenue
- BARNES WOODHALL (1937-43; 1945), M.D.  
*Professor of Neurosurgery* Hope Valley
- JAMES W. WOODS (1949), M.D.  
*Instructor in Medicine* 1404 Oakland Avenue
- ROBERT HILLIARD WOODY (1929), Ph.D.  
*Associate Professor of History* 2648 University Drive
- MRS. ELEANOR JANE HERRING WOOTEN (1946), M.D.  
*Instructor in Pediatrics* Duke Hospital
- DEWITT WRIGHT (1943), J.D.  
*Instructor in Hospital Administration* Hillsboro, N. C.
- WARREN GRICE YATES (1949), A.M.  
*Instructor in German* 409 Carver Street
- DAVID A. YOUNG (1946), M.D.  
*Lecturer in Neuropsychiatry* Duke Hospital
- \*FRANKLIN WOODROW YOUNG (1945), Ph.D.  
*Assistant Professor of Biblical Theology* Duke University Apartments
- KARL EDWARD ZENER (1928), Ph.D.  
*Professor of Psychology* Sparger Road
- HALINA ZUKOWSKI (1950), R.N., B.S., M.L.  
*Instructor in Psychiatric Nursing* Baker House

\* Resigned, February 1, 1951.

† Resigned, September 1, 1950.



## PART-TIME INSTRUCTORS

DOUGLAS R. ALLENSON (1950), M.A. <i>Chemistry</i>	Guess Road
CARROLL RAYBOURNE BALL (1950), M.S. <i>Zoology</i>	Westover Park Apartments
WADE THOMAS BATSON, JR. (1950), A.M. <i>Botany</i>	Creedmoor, N. C.
WILLIAM WARD BROWN (1949), Ph.D. <i>Physics</i>	Duke University Apartments
EDWARD REAP BUCKNER (1950), B.S. <i>Geology</i>	Chapel Hill, N. C.
MRS. JEAN CASALE BURKUS (1950), A.M. <i>Zoology</i>	2518 Englewood Avenue
BENJAMIN THEODORE COLE (1950), B.S. <i>Zoology</i>	Hope Valley
GEORGE ARTHUR DELHOMME, JR. (1950), M.A. <i>Latin</i>	1503 Miami Boulevard
RONALD D. EMMA (1949), B.A. <i>Economics</i>	1010 Gloria Avenue
FRED ERWIN FRIEND (1950), A.M. <i>English</i>	1215 Sixth Street
JOHN CALDWELL GUILDS, JR. (1948), M.A. <i>English</i>	818 Sixth Street
MRS. MARTHA ZANT HARDY (1947-49; 1950), A.B. <i>English</i>	Chapel Hill, N. C.
ROBERT TAYLOR HERBST (1950), M.S. <i>Mathematics</i>	812 Madison Street
WILLIAM LAWRENCE HIGHFILL (1950), B.D. <i>Latin</i>	Route 1, Box 88
NORMAN DAVIS KNOX (1950), A.B. <i>English</i>	409 North Gregson Street
JOSEPH BURCH KYLE (1950), A.M. <i>History</i>	Creedmoor, N. C.
FRANK ROLAND OLSON (1950), M.A. <i>Mathematics</i>	1106 Burch Avenue
WILLIAM ALLAN POWELL (1949), B.S. <i>Chemistry</i>	Duke University Apartments
DAVID RABIN (1948), B.S. in M.E. <i>Mechanical Engineering</i>	2014 Bivins Street
JAMES BRADY REECE (1948-50; 1951), A.M. <i>English</i>	1004 Shepherd Street
HORACE LEWIS SAWIN (1951), M.A. <i>English</i>	West Campus
WILLIAM CHARLES SEYLER (1950), M.A. <i>Political Science</i>	2401 University Drive
WILLIAM RODGER SMYTHE, JR. (1950), B.S. <i>Mathematics</i>	634 Colonial Drive
RALPH FRANCIS TRANBARULO (1950), Ph.D. <i>Physics</i>	920 Buchanan Boulevard

NORMAN WILKS (1950), M.S.

*Zoology*

1217 Rosedale Avenue

ARTHUR BRUCE WINTER (1950), M.A.

*Political Science*

300 Leon Street

### INSTRUCTIONAL ASSISTANTS

#### Legal Aid Clinic

SUMTER C. BRAWLEY, JR. (1946), LL.B.

2305 Club Boulevard

SAMUEL FOX GANTT (1949), LL.B.

University Apartments

CHARLES FRANKLIN GRIFFIN (1950), LL.B.

West Campus

CARL A. HYLDBURG, JR. (1948), LL.B.

Alastair Apartments

ALTON J. KNIGHT (1938), LL.B.

Fish Dam Road

#### Physical Education, Trinity College

JAMES ROBERT BLY (1949), M.S.

*Instructor in Physical Education; Coach of Soccer*

1004 Urban Avenue

HAROLD L. BRADLEY (1950), B.S.

*Instructor in Physical Education; Coach of Basketball*

1023 Lakewood Avenue

HERSCHEL AMOS CALDWELL (1930), B.S.

*Instructor in Physical Education; Coach of Freshman Sports,  
and Assistant Coach of Football*

908 Markham Avenue

ROBERT LEE CHAMBERS (1933), B.S. in Ed.

*Instructor in Physical Education; Head Coach of Varsity Track*

2311 Prince Street

JOHN WESLEY COOMBS (1929), M.A.

*Instructor in Physical Education; Head Coach of Varsity Baseball*

West Campus

ROBERT CALVIN COX (1942), M.A.

*Instructor in Physical Education; Assistant Coach of Football;  
Coach of Varsity Tennis*

1826 Guess Road

JACK W. ESLICK (1950)

*Part-time Instructor in Physical Education*

805 Watts Street

CARMEN M. FALCONE (1946), M.A.

*Instructor in Physical Education; Coach of Varsity Wrestling;  
Assistant in Football*

University Apartments

\*KENNETH CHARLES GERARD (1931), B.S.

*Instructor in Physical Education; Director of Intramural Sports;  
Coach of Basketball*

University Apartments

ELLIS P. HAGLER (1936), A.B.

*Instructor in Physical Education; Coach of Varsity Golf;  
Assistant Coach of Football*

220 Forest Wood Drive

†FRANCIS PARKS HARRISON (1947), M.A.

*Instructor in Physical Education; Assistant Coach of Wrestling*

2511 Pickett Road

DONALD MELVIN HEDSTROM (1949), B.S.

*Instructor in Gymnastics and Swimming; Coach of Gymnastics*

West Campus

HORACE JAMES HENDRICKSON (1949), A.B.

*Coach of Freshmen*

1026 Minerva Avenue

JOHN WILLIAM HENDRIX (1947), M.S.

*Part-time Instructor in Physical Education; Coach of  
Varsity Tennis*

220 Forest Wood Drive

\* Died, January 17, 1951.

† Absent on leave, spring semester, 1950-51.

MICHAEL L. KARMAZIN (1948), A.B. <i>Assistant Coach of Football</i>	2507 Shenandoah Avenue
HUBERT MURRY LEWIS (1937), B.S. <i>Acting Business Manager of Athletics</i>	Pickett Road
ROBERT JOHN MONTFORT (1940), B.A. <i>Assistant Instructor in Physical Education</i>	3300 Cole Mill Road
CLARENCE MCKAY PARKER (1947) <i>Assistant Coach of Football</i>	Kirkwood Apartments
WALTER SCOTT PERSONS (1930), A.B. <i>Instructor in Physical Education; Coach of Swimming; Coach of Lacrosse</i>	612 Swift Avenue

### *Other Officers*

#### DUKE UNIVERSITY PRESS

WILLIAM THOMAS LAPRADE, Ph.D. <i>Acting Director</i>	1108 Monmouth Avenue
ASHBEL GREEN BRICE, A.M. <i>Editor and Associate Director</i>	814 Sixth Street

#### RELIGIOUS LIFE

JAMES TOUGH CLELAND, Th.M. <i>Preacher to the University</i>	2117 Myrtle Drive
FRANKLIN SIMPSON HICKMAN, Ph.D., D.D. <i>Preacher to the University</i>	921 Markham Avenue
JAMES HENRY PHILLIPS, Ph.D. <i>Director of Religious Activities</i>	2517 Perkins Road
ETHELENE SAMPLEY <i>Director of Religious Activities, Woman's College</i>	Faculty Apartments
CECIL ADDERHOLDT, B.D. <i>Chaplain to Lutheran Students</i>	Duke University
RAY ALLEN, B.D. <i>Chaplain to Methodist Students</i>	903 West Proctor Street
JAMES O. CANSLER, B.D. <i>Chaplain to Baptist Students</i>	321 East Main Street
NORMAN B. GIBBS, B.D. <i>Chaplain to Presbyterian Students</i>	Duke University Apartments
GEORGE A. WORKMAN, B.D. <i>Chaplain to Episcopal Students</i>	903 West Markham Avenue
RUSSELL L. DICKS, B.D., D.D. <i>Chaplain of Duke Hospital</i>	2308 Prince Street

#### MUSIC AND ART

JAMES FOSTER BARNES, A.M. <i>Director of Choral Music</i>	2401 Cranford Road
MRS. JAMES FOSTER BARNES <i>Director of Woman's College Glee Club</i>	2401 Cranford Road
ALLAN HADLEY BONE, M.M. <i>Conductor of the Chamber and Symphony Orchestras</i>	2314 Club Boulevard

ROBERT EARL GRAY, M.M. <i>Conductor of the Concert and Marching Bands</i>	814 Watts Street
ANTON BREES <i>University Carillonneur</i>	Duke University
MRS. MILDRED LITTLE HENDRIX, B.S. <i>University Organist</i>	144 Pinecrest Road
MRS. EUGENIA CURTIS SAVILLE, A.M. <i>Conductor of the Madrigal Singers</i>	Duke University Apartments
MARY HELEN STONE, A.B. <i>Art Curator</i>	2114 Club Boulevard

## PHYSICAL EDUCATION AND STUDENT HEALTH

EDMUND McCULLOUGH CAMERON, A.B. <i>Director of Physical Education and Athletics, West Campus</i>	Hope Valley
DAN WINFIELD HILL, A.B. <i>Assistant Athletic Director</i>	2427 Glendale Avenue
JULIA REBECCA GROUT, M.S. <i>Professor of Physical Education, Woman's College</i>	804 Fourth Street
ELBERT LAPSLEY PERSONS, M.D. <i>Director of Student Health</i>	723 Anderson Street
CAROLINE E. HELMICK, M.D. <i>Director of Student Health, Woman's College</i>	East Campus Infirmary
*MRS. BETTY DEW REILLY, R.N. <i>Resident Nurse, Woman's College</i>	East Campus Infirmary
MOZELLE VESTAL, R.N. <i>Resident Nurse, Woman's College</i>	East Campus Infirmary
MIRIAM A. WILSON, R.N. <i>Resident Nurse, Woman's College</i>	Box 151, Route 1
MRS. OLLIE PHILLIPS BURNETT, R.N. <i>Resident Nurse, West Campus</i>	1404 Arnette Avenue

## RESIDENCE

MARY GRACE WILSON, A.M. <i>Dean of Residence, Woman's College</i>	Faculty Apartments
MRS. FRANCES M. WHITAKER, A.M. <i>Assistant to Dean of Residence; Counselor, Brown House</i>	Brown House
MRS. MARY NORCUTT PEMBERTON <i>Hostess, West Campus</i>	West Campus Union
EVELYN BARNES, B.S. <i>Counselor, Alspaugh House</i>	Alspaugh House
POLLY BARNWELL, A.B. <i>Counselor, Pegram House</i>	Pegram House
JEAN BRACKMAN, B.S. <i>Counselor, Bassett House</i>	Bassett House
MIRIAM J. E. BROWN <i>Counselor, Southgate House</i>	Southgate House
DOROTHY J. MARPLE <i>Counselor, Aycock House</i>	Aycock House
* Resigned, June 30, 1950.	

Mrs. HARRIET TAYLOR <i>Counselor, Giles House</i>	Giles House
MARY MOSS WELLBORN, A.B. <i>Counselor, Jarvis House</i>	Jarvis House
*MABEL HAGEMEYER, M.S. <i>Production Supervisor, the Dining Halls, Men's College</i>	1507 W. Pettigrew Street
RUBY MORGAN, B.S. <i>Production Supervisor, the Dining Halls, Men's College</i>	Powe Apartments
JAMES O. COX, JR. <i>Personnel Supervisor, the Dining Halls, Men's College</i>	206 Jones Street
MARVIN G. JOHNSON <i>Personnel Supervisor, the Dining Halls, Woman's College</i>	1304 North Duke Street
LAURA M. DEYOE, B.S. <i>Service Supervisor, the Dining Halls, Men's College</i>	916 Second Street
W. JAMES MILLER, A.B. <i>Assistant to the Manager, the Dining Halls, Men's College</i>	206 Jones Street
MARJORIE KNAPP, B.S. <i>Assistant Manager, the Dining Halls, Woman's College</i>	Southgate House
†MRS. CHRISTIE K. KNUDSEN, B.S. <i>Dietitian, Southgate House</i>	1324 Vickers Avenue
MRS. FRANK VAN DE LINDE, B.S. <i>Supervisor, the Dining Hall, Southgate House</i>	2401 Club Boulevard

### *The University Libraries*

BENJAMIN POWELL, Ph.D. <i>Librarian</i>	626 Swift Avenue
ROBERT W. CHRIST, M.S. <i>Assistant Librarian</i>	1403 Watts Street

#### UNIVERSITY LIBRARY

MRS. DOROTHY W. ATKINS, A.B., B.S. in L.S. <i>Serials Cataloger</i>	1700 Markham Avenue
MRS. MILDRED K. BALDWIN <i>Assistant in charge of Binding</i>	Alastair Apartments
MRS. MARY H. BARNES, A.B. <i>Assistant, Rare Books</i>	1013 Broad Street
MARY ELIZABETH BITTING, M.A. <i>Subject Cataloger and Pamphlets Librarian</i>	2105 Club Boulevard
FLORENCE E. BLAKELY, B.A., B.S. in L.S. <i>Reference Librarian</i>	1004 West Trinity Avenue
ANNA SYBIL CAMERON, A.B. <i>Assistant, Circulation Department</i>	2818 Chelsea Circle
MARY WHITFIELD CANADA, A.M. <i>Undergraduate Librarian</i>	1312 Second Street
ELIZARETH P. CONE, A.B. <i>Assistant, Manuscripts</i>	702 Buchanan Boulevard

\* Died, October 9, 1950.

† Resigned, September 1, 1950.



- LENA COVINGTON, A.B., A.B. in L.S.  
*Head, Subject Cataloging* 403 Watts Street
- MRS. WILMA CROWELL, B.A.  
*Assistant Periodicals Librarian* Westover Park Apartments
- MRS. MINA H. DANIELS, B.A.  
*Assistant, Order Section* 924 West Trinity Avenue
- MILDRED G. EMMONS, B.A.  
*Serials Cataloger* 1004 West Trinity Avenue
- ESTHER EVANS, A.B., B.S. in L.S.  
*Subject Cataloger* 1007 Urbau Avenue
- MRS. BETTY R. FARRIS, B.A.  
*Assistant, Serials Section* 1018 Buchanan Boulevard
- MRS. EVELYN K. GADDY  
*Librarian, Physics-Mathematics* Westover Park Apartments
- MRS. ELIZABETH D. GEER, B.A., B.S. in L.S.  
*Reference Librarian* Chapel Hill, N. C.
- F. WILBUR HELMBOLD, B.A.  
*Descriptive Cataloger* 1707 Angier Avenue
- EDWIN J. HIX, B.A., A.B. in L.S.  
*Newspaper and Film Librarian* 812 Fourth Street
- MRS. EDWINA D. JOHNSON, B.S.  
*Librarian, Biology-Forestry* 608 North Gregson Street
- JEAN JOHNSON  
*Assistant, Circulation Department* 219 West Trinity Avenue
- MRS. ETHEL LONG KALE  
*Librarian, Engineering* 3325 Chapel Hill Road
- DOROTHY F. KIRKLAND, A.B., A.B. in L.S.  
*Descriptive Cataloger* 407 Carolina Circle
- MRS. EDITH V. KRAMER, M.A.  
*Subject Cataloger* 2251 Cranford Road
- WILHELMINA LEMEN, A.B., A.B. in L.S.  
*Documents Librarian* 2714 Shenandoah Avenue
- GERTRUDE MERRITT, A.B.  
*Chief, Technical Processing* Powe Apartments
- EDWARD J. MEYERS  
*Subject Cataloger* 102 Forest Wood Drive
- MRS. MARGARET B. MOORE, B.A.  
*Bibliographer* 1505 Duke University Road
- HELEN E. OYLER, A.B., B.S. in L.S.  
*Head, Serials Section* 115 Higbee Street
- MRS. MARY A. PANNILL, B.S.  
*Assistant in charge Graduate Reading Room* 901 Fifth Street
- MARY ELEANOR PARKER, B.A., B.S. in L.S.  
*Descriptive Cataloger* 1312 Markham Avenue
- WIXIE E. PARKER, A.B., B.S. in L.S.  
*Periodicals Librarian* Powe Apartments
- MRS. OLGA M. PERLZWEIG, Ph.D.  
*Bibliographer* 407 Swift Avenue

MRS. CATHARINE J. PIERCE, M.S. <i>Acting Head, Reference Department</i>	222 Morris Street
MARY E. PLOWDEN, A.B., A.B. in L.S. <i>Head, Order Section</i>	108 West Geer Street
E. GRAHAM ROBERTS, Ph.D. <i>Curator of Manuscripts</i>	911 Demerius Street
HONORA L. ROSE <i>Assistant, Order Section</i>	108 West Geer Street
MATTIE RUSSELL, M.A. <i>Assistant Curator of Manuscripts</i>	2209 Woodrow Street
MARY OPAL SHUFORD, A.B., A.B. in L.S. <i>Descriptive Cataloger</i>	805 Sixth Street
THOMAS M. SIMKINS, JR., M.A. <i>Curator of Rare Books</i>	2313 University Drive
LENORA RUTH SMITH <i>Librarian, Chemistry</i>	515 West Chapel Hill Street
MRS. PHYLLIS F. SMITH <i>Assistant, Circulation Department</i>	2209 Alabama Avenue
SHIRLEY STEVENS <i>Assistant, Documents</i>	601 Watts Street
JANE STURGEON, B.S., B.S. in L.S. <i>Head, Descriptive Cataloging Section</i>	115 Higbee Street
ELLEN L. SUMNER, M.A. in L.S. <i>Bibliographer</i>	1005 Monmouth Avenue
MRS. ANNE S. THOMPSON, A.B. <i>Assistant, Serials Section</i>	804 Second Street
KATHRYN M. TUTTLE, A.B. <i>Assistant, Newspaper Room</i>	819 Buchanan Boulevard
J. P. WAGGONER, JR., B.D. <i>Head, Circulation Department</i>	605 Tiona Avenue
MRS. BETTY M. WARREN, A.B. <i>Bibliographer</i>	2624 Chapel Hill Road
MRS. JANICE T. WEHMEIER <i>Bookkeeper</i>	125 West Lynch Street
*MARY WESCOTT, A.B., B.S. in L.S. <i>Subject Cataloger</i>	Raleigh, N. C.
MRS. ERMA P. WHITTINGTON, A.B., B.S. in L.S. <i>Subject Cataloger</i>	2011 James Street
MRS. BETTY P. YOUNGBLOOD, B.S. <i>Assistant, Circulation Department</i>	2347 Huron Circle

## WOMAN'S COLLEGE LIBRARY

EVELYN J. HARRISON, A.B., B.S. in L.S. <i>Librarian</i>	403 Watts Street
MRS. FLORENCE L. FARMER, A.B. <i>Assistant, Circulation Department</i>	619 West Markham Avenue
MRS. SPEARS HICKS, A.B., B.S. in L.S. <i>Reference Librarian</i>	121 West Seeman Street

\* Absent on leave, 1950-51.

FLORINE LEWTER, A.B., A.B. in L.S. <i>Periodicals Librarian</i>	1512 North Duke Street
MRS. MARION M. RANDALL, M.A. <i>Cataloger</i>	Faculty Apartments
MARGARET S. TILLET, A.B., A.B. in L.S. <i>Circulation Librarian</i>	1405 North Mangum Street
CATHERINE V. TYSINGER, A.B., B.S. in L.S. <i>Cataloger</i>	1012 Minerva Avenue

## DIVINITY SCHOOL LIBRARY

DONN MICHAEL FARRIS, M.S. in L.S. <i>Librarian</i>	1018 Buchanan Boulevard
JOYCE G. LOCKHART, A.B. <i>Assistant in Divinity Library</i>	905 Sixth Street

## LAW SCHOOL LIBRARY

MARIANNA LONG, A.B., B.S. in L.S. <i>Librarian</i>	403 Watts Street
MRS. DULCIE D. BARLOW, B.M. <i>Assistant</i>	University Apartments
MADELINE COPELAND, A.B., A.B. in L.S. <i>Cataloger</i>	1018 Monmouth Avenue
KATHERINE DAY, B.S. <i>Assistant Librarian in charge of Acquisitions</i>	512 Watts Street
MRS. JOAN GRAVES <i>Assistant, Circulation</i>	1640 Cole Mill Road

## MEDICAL SCHOOL LIBRARY

JUDITH FARRAR, A.B., B.S. <i>Librarian</i>	Faculty Apartments
MRS. MILDRED PERKINS FARRAR, A.B. <i>Assistant Librarian</i>	Faculty Apartments
MRS. JESSIE HARNED BUFKIN, R.N., R.R.L. <i>Medical Record Librarian</i>	2425 Perkins Road

# Admission to the Colleges



**A**PPLICANTS may qualify for admission as members of the freshman class or as students with advanced standing. Since the enrollment is limited, the Committee on Admissions selects students who, in its judgment, are best qualified to benefit from the educational advantages which the colleges offer. The Committee bases its decision on the academic record of the applicant, on test scores when available, and on satisfactory evidence of good character and general fitness for college life at Duke. A personal interview with an officer of the University or a designated alumnus or alumna is of material benefit to the Committee and the applicant.

**ADMISSION TO THE FRESHMAN CLASS:** An applicant for admission to the freshman class must present at least fifteen acceptable units of secondary-school credit. A unit of credit is allowed for a course of study pursued throughout an academic year in an accredited secondary school, provided five recitations a week have been held and the prescribed amount of work has been completed satisfactorily.

*For admission to Trinity College and the Woman's College* twelve of the fifteen units must be in English, foreign language, history\* and social studies, mathematics, and natural science. They must include three units in English, one unit in algebra, and one unit in plane geometry. The three remaining units may be in the five subjects listed above or they may be selected from the following table. The numeral indicates the maximum amount of unit credit acceptable in each subject:

Agriculture .....	2	Mechanical Drawing .....	2
Art .....	1	Music .....	1
Commercial Subjects .....	3	Physical Geography .....	1
Household Economics .....	2	Woodworking, Machine Work .....	2

Credit for units offered in subjects not included in this list will be considered on the basis of full statements transmitted with the applicant's record from the school recommending him.

*For admission to the College of Engineering* seven of the fifteen units must be in English (3 units), physical science (1 unit), algebra ( $1\frac{1}{2}$  units), plane geometry (1 unit), and solid geometry† ( $\frac{1}{2}$  unit). The remaining eight units are elective. At least five of them must

\* Applicants who do not present two acceptable units of history must take history in college.

† Any deficiency in this requirement must be made up before the beginning of the sophomore year.

be in English, foreign language, history and social studies, mathematics, and natural or physical science. It is recommended that these five be chosen from the following list:

English (in addition to the required 3 units) .....	1 unit
Algebra (in addition to the required $1\frac{1}{2}$ units) .....	$\frac{1}{2}$ unit
Trigonometry .....	$\frac{1}{2}$ unit
Physics or chemistry or biology (in addition to the required unit) ...	1 to $\frac{3}{4}$ units
Foreign languages .....	1 to 4 units
*History and social studies .....	1 to 3 units

The three additional units needed to make the total of fifteen may be chosen from the subjects listed above or they may be selected at large from the following table, which gives the subjects acceptable for entrance credit and the maximum credit acceptable in each subject:

English .....	4	Zoology .....	1
Latin .....	4	General Biology .....	1
Greek .....	3	Physical Geography .....	1
German .....	3	General Science .....	1
French .....	3	Agriculture .....	2
Spanish .....	3	Mechanical Drawing .....	2
Mathematics .....	4	Shop Work .....	2
History and Civics .....	4	Art .....	1
Physics .....	1	Music .....	1
Chemistry .....	1	Commercial Subjects .....	3
Botany .....	1		

**ADMISSION TO ADVANCED STANDING:** An applicant for advanced standing must have fulfilled the equivalent of the requirements for admission to the freshman class, must present official certificates of all work completed in other institutions, and must have an honorable dismissal from each institution previously attended. Credit for work completed will be determined in relation to the curriculum requirements of the college in which the transfer enrolls at Duke University.

A student who transfers with advanced standing to Trinity College or the Woman's College from a junior college or from a four-year college not affiliated with the Southern or a similar regional association must continue, for at least one semester in Trinity College or in the Woman's College, the foreign language he presents for minimum graduation requirements. Credit for courses in science offered for advanced standing by a transfer from a junior college or a non-affiliated four-year college will be determined by the departments concerned.

Applicants for advanced standing in the College of Engineering should present, as far as possible, subjects corresponding to those required by the college. They may not, during their first semester, register for more than the minimum number of hours required of the class which they enter, except by permission of the Dean of the College of Engineering.

\* Applicants who do not present at least one acceptable unit of history must take history in college.



Transfer credits are tentatively evaluated pending the completion of two semesters of work in residence. To validate provisional credits the student must earn at least an average of C in a normal load of work. Transfer grades of C or above are rated at one quality point per credit hour when validated. Credits with grades of D are not acceptable.

The maximum amount of credit acceptable from a junior college is 60 semester hours, exclusive of physical education. No credit is given for work completed by correspondence, and credit for no more than six semester hours is allowed for extension courses. Any extension work accepted must be specifically approved by the dean of the college to which the student seeks admission.

**ADMISSION OF SPECIAL STUDENTS:** Upon the approval of the dean, students of mature age may be admitted for special work in such courses of instruction as they are qualified to take. They may not be admitted as candidates for a degree in a regular course unless they meet all normal requirements for admission.

**ADMISSION PROCEDURE:** Application for admission to Trinity College and the College of Engineering should be made to the Director of Admissions, Trinity College and the College of Engineering, Duke Station, Durham, North Carolina. Application for admission to the Woman's College should be made to the Director of Admissions, Woman's College, College Station, Durham, North Carolina. Application forms and instructions will be sent to the applicant. It is the responsibility of the applicant to see that these forms are properly executed, and, together with other requested material, sent to the designated official.

Application prior to the final year of the secondary-school course is not required. Formal steps looking toward admission should be initiated, however, early in the senior year.

A graduate of an accredited school who submits fifteen acceptable units of secondary-school subjects, who is recommended by his principal, and who otherwise meets the requirements of the Committee on Admissions may be admitted without examination. The certification and recommendation must be on blanks furnished by the college and signed by the principal of the school in which the applicant completed his course. An applicant who presents fifteen acceptable units for admission from a non-accredited school is required to validate these units by entrance examinations and such other tests as the college may prescribe.

**READMISSION OF FORMER STUDENTS:** A student who, following withdrawal from college, desires to return should apply to the appropriate director of admissions. When applying for readmission the student should make a detailed statement of his or her activities since leaving Duke University.

# Financial Information and Living Accommodations



**F**EES paid by the students cover only a part of the cost of their instruction and of the operations of the University. Income from endowment and contributions from the alumni, alumnae, and other public-spirited men and women meet the balance, which constitutes more than half the total cost.

## *Fees*

A registration fee of \$20.00 is required of all new students. This fee is payable only once. A tuition fee of \$175.00 and a general fee of \$75.00 are payable at the beginning of each semester. The general fee is in lieu of special fees usually charged for matriculation, use of laboratories, student health service, commencement, etc. Special fees for instruction in Applied Music are listed on page 102.

Due to rising costs a readjustment in charges, including room-rents, is being considered. In the event of an adjustment applicants will be notified.

An advance deposit of \$25.00 is required of all students in residence at the time of spring registration in order to reserve a place in classes for the fall semester. This is applied toward payment of the general fee at the opening of the fall semester. The deposit will be refunded to students whom the University does not permit to return. Students who of their own volition fail to return are not entitled to a refund.

An advance deposit of \$25.00 is also required of old students who have been out of school for one or more semesters and have been accepted for readmission. It is applied toward payment of the general fee for the semester of readmission. The advance deposit is paid at the time of notification of acceptance and is not refundable.

Refunds of tuition and other fees are made to students who withdraw within 14 days after the beginning of the semester. On and after the fifteenth day all fees are considered as earned and no refunds are made.

Students who register during the regular academic year for no

more than two courses with a maximum credit of 8 semester hours are classified as special students. They are charged a registration fee of \$5.00 for each course, and \$12.00 for each semester hour of course credit. Students taking nine or more hours are charged full fees.

Auditors are permitted to attend classes provided they secure the consent of the instructor. They submit no daily work, take no examinations, and receive no credit. Students taking a full program and paying full fees may audit one or more courses without charge. Students not paying full fees are charged \$10.00 for each course each semester.

Students are entitled to one transcript free of charge. Additional copies are supplied at \$1.00 each. Records are not released when the Treasurer's Office reports an unpaid account.

Students may have their bills sent to parents or guardians provided the Treasurer has been notified in writing with sufficient antecedence. Failure of a student or of a parent or guardian to pay bills on the dates scheduled will debar the student from class attendance until his account is settled in full; subsequent withdrawal does not entitle him to a refund. No student is considered by the Faculty as a candidate for graduation until he has settled with the Treasurer for all his indebtedness to the University. A student who has not settled all his bills with the Treasurer is not allowed to stand the final examinations of the academic year.

### *Estimated Expenses for an Academic Year*

Incidental expenses depend upon the tastes and habits of the individual, but the actual necessary expenses for an academic year are as follows:

	<i>Low</i>	<i>Moderate</i>	<i>Liberal</i>
Tuition .....	\$350.00	\$ 350.00	\$ 350.00
General Fee .....	150.00	150.00	150.00
Room Rent .....	100.00	125.00	175.00
Board .....	325.00	375.00	450.00
Laundry .....	25.00	30.00	35.00
Books .....	20.00	30.00	40.00
	<hr/>	<hr/>	<hr/>
	\$970.00	\$1,060.00	\$1,200.00

The actual fees and expenses necessary for one year in residence as a student in Trinity College, the Woman's College, or the College of Engineering can be met with \$970.00.

### *Student Aid*

Duke University is interested in students with ability and ambition. It is the aim of the University Scholarship Committee and others affiliated with the Student Aid Program to provide, insofar as pos-

sible, the financial assistance required by worthy students. This assistance takes various forms. The actual cost to the University for each student is more than twice the amount received from the student. The deficit is paid out of contributions and income from endowment. Scholarships and prizes enable students with inadequate resources to reduce the amount payable to the University. Loans are made available, and through the Student Employment Offices part-time jobs are arranged. Through the Student Aid Program an earnest effort is made to eliminate the economic status of the student as a criterion for admission.

### *Scholarships*

Scholarships intended to aid needy and deserving students have been established from time to time by persons deeply interested both in Duke University and in the members of its student body. Scholarship endowments are held in trust and are kept separate from other holdings of the University. All income is applied in accordance with the terms of the gift or bequest.

Scholarships are awarded annually by a committee of the Faculty appointed by the President of the University. In some cases donors have specified certain limitations and conditions, but in all cases final award is made by the University Scholarship Committee.

Any prospective student may apply for a scholarship. Applications, however, may be made formally by a prospective student only after his application for admission has been made, all necessary credentials have been presented, and notification of acceptance has been given. Applications are made by letter; they must include, on a form furnished by the University, a complete statement of the applicant's needs. Since the number of scholarships available is small in comparison with the number of applicants, the committee is forced to limit scholarship aid to cases where the need is imperative.

All applications for scholarship aid should be made to the Executive Secretary, the Scholarship Committee, Office of the Secretary, Duke University, Durham, N. C.

The following scholarship funds are available to undergraduates. Awards, made annually, are based on the scholastic standing, the character, and the need of the applicants. Other factors of interest to the Scholarship Committee are extra-curricular activities, church activities, and general promise of achievement.

#### FRED SOULE ALDRIDGE SCHOLARSHIP FUND

Established December 1947 by gift of Fred S. Aldridge, '98, and Mrs. Fred Aldridge and supplemented by annual contributions from the Durham County Alumni; the income to be used for scholarship aid, preference to be given to young men from Durham County.

**GEORGE G. ALLEN SCHOLARSHIP FUND**

Established July 1947 by gift of George C. Allen; the income to be used for scholarship aid to deserving boys and girls from Warren County, N. C., and, under certain conditions, to other worthy students.

**ALUMNAE SCHOLARSHIP FUND**

Established May 1940 by the Alumnae Association, in connection with the celebration of the Centennial of Duke University; the income to be used for scholarship aid to young women students of the Woman's College.

**ALUMNI MEMORIAL SCHOLARSHIP FUND**

Established December 1943 by several donors, in memory of alumni of Duke University who lost their lives during World War II; the income to be used for scholarship aid to worthy students.

**ATLANTA ALUMNI SCHOLARSHIP FUND**

Established May 1941 by gifts of members of the Alumni Association of Atlanta, Ga.; the income to be used for scholarship aid to worthy students.

**ALICE M. BALDWIN SCHOLARSHIP FUND**

Established June 1945 and supplemented from time to time by gifts from students and alumnae in honor of Alice M. Baldwin, Dean of the Woman's College, 1923-1947; to be used for scholarship aid to undergraduate students in the Woman's College.

**BANKS-BRADSHAW SCHOLARSHIP FUND**

Established 1913 by gift of W. L. Banks and Mike Bradshaw, '78; the income to be used for scholarship aid to worthy students.

**HERBERT J. BASS SCHOLARSHIP**

Established 1900 by gift of Mr. and Mrs. Herbert J. Bass of Durham, N. C., in memory of their son, Herbert J. Bass, Jr.; the income to be used for scholarship aid to worthy students.

**EDGAR S. BOWLING SCHOLARSHIP FUND**

Established 1928 by gift of Edgar S. Bowling, '99, in memory of his sister, Mrs. Maye Bowling Bennett, '12; the income to be used for scholarship aid, preference to be given to boys and girls from Durham and adjoining counties.

**ELIZABETH CROWELL CARNES FOUNDATION**

Established January 1948 by bequest of Elizabeth Crowell Carnes, in memory of her parents, Jonas William Crowell and Virginia Vick Crowell; the income to be used for scholarship aid for young men and women of Duke University.

**CENTENNIAL SCHOLARSHIP FUND**

Established 1939 by gifts from several donors in connection with the Centennial celebration of Duke University; the income to be used for scholarship aid to worthy students.

**CHRISTIAN EDUCATION SCHOLARSHIP FUND**

Established by various contributions designated for scholarships in the Christian Education Movement; includes contributions from Julian S. Carr, Mrs. Annie A. Foushee, C. T. Johnson, H. E. Myers, the Pegram Family, W. P. Suggs, E. T. White, Mr. and Mrs. J. C. Braswell and Mrs. R. C. Bruton, in memory of Alexander Walker; the Alumni of Harnett County, and others; the income to be used for scholarship aid to worthy students.

**CLASS OF 1906 SCHOLARSHIP FUND**

Established July 1937 by gifts from several members of the Class of 1906; the income to be used for scholarship aid to worthy students.



**CLASS OF 1912 SCHOLARSHIP FUND**

Established by gifts from several members of the Class of 1912; the income to be used for scholarships to worthy students.

**CLASS OF 1914 SCHOLARSHIP FUND**

Established December 1938 during the Centennial celebration of Duke University, by various members of the class; the income to be used for scholarship aid to worthy students, preference to be shown to descendants of the members of the Class of 1914.

**CLASS OF 1918 SCHOLARSHIP FUND**

Established by gifts from several members of the Class of 1918; the income to be used for scholarship aid to worthy students.

**E. M. COLE FOUNDATION**

Established 1920 by E. M. Cole, Charlotte, N. C.; the income to be used for scholarships for the benefit of undergraduate students preparing for the ministry.

**ROBERT B. COX SCHOLARSHIP FUND**

Established 1949 by gift of Robert L. Wolf and supplemented by gift of Wright T. Dixon, Jr. The income to be used for scholarship aid to undergraduate men.

**WILL L. CUNINGGIM SCHOLARSHIP**

Established 1934 by bequest of Mrs. W. L. Cuninggim, and supplemented by bequest of Mrs. Albert Bourne, in memory of Reverend Will L. Cuninggim; the income to be used for scholarship aid, preference to be given to graduates of the Methodist Orphanage, Raleigh, N. C.

**ROSE M. DAVIS SCHOLARSHIP FUND**

Established 1941 by Dr. Rose M. Davis; the income to be used for scholarship aid.

**JERE R. DOWNING SCHOLARSHIP FUND**

Established 1936 by Mrs. Alice M. Downing and her son, J. Robert Downing, '35, as a memorial to their husband and father, Jere R. Downing of Kennebunk, Me.; the income to be used for scholarship aid, preference to be given to students from New England.

**DUKE DAD'S DAY SCHOLARSHIP FUND**

Established 1941 by contributions of fathers attending the Duke Dad's meeting; to be used for scholarship aid.

**B. N. DUKE SCHOLARSHIP FUND**

Established 1939 by bequest of Sarah P. Duke in memory of her husband, Benjamin N. Duke; comprised of one-half of the income earned by the bequest of Sarah P. Duke to the B. N. Duke Endowment Fund; to be used for scholarship aid to worthy and needy students of Duke University.

**DUKE UNIVERSITY SUNDRY SCHOLARSHIPS**

Gifts by miscellaneous donors for current use as scholarships.

**ENGINEERING SCHOLARSHIP FUND**

Established by gifts of various persons; to be used for scholarship aid to engineering students.

**WILLIAM P. FEW MEMORIAL SCHOLARSHIP**

Established 1942 by gifts from various persons; to be used for scholarship aid to worthy students.

**ARTHUR ELLIS FLOWERS SCHOLARSHIPS**

Established 1901 by Col. and Mrs. George W. Flowers, in memory of their son, Arthur Ellis Flowers; the income to be used for scholarship aid to worthy students.

**GEORGE W. FLOWERS SCHOLARSHIP FUND**

Established June 1927 by gift of Claude M. Flowers, '09, in memory of his father, Col. George W. Flowers, for many years a Trustee of Trinity College; the income to be used for scholarship aid to needy and worthy students.

**ROBERT L. FLOWERS SCHOLARSHIP FUND**

Established May 1939 by gift of R. L. Flowers; income to be used for scholarship aid to worthy students.

**R. L. FLOWERS TRUST SCHOLARSHIP FUND**

Established 1948 by bequest of Lily Parrish Flowers; the income to be used for scholarship aid for worthy students.

**GENERAL UNIVERSITY SCHOLARSHIP FUND**

Miscellaneous gifts from numerous persons; to be used currently for scholarship aid to worthy students.

**GUILFORD COUNTY SCHOLARSHIP FUND**

Established 1941 by miscellaneous gifts of several persons; the income to be used for scholarship aid to worthy students.

**A. H. GWYN SCHOLARSHIP FUND**

Established May 1941 by A. H. Gwyn, '18; the income to be used for scholarship aid to worthy students.

**P. HUBER HANES SCHOLARSHIP FUND**

Established 1939; consisting of  $\frac{3}{5}$  of the income accruing annually to the P. Huber Hanes Fund; to be used for scholarship aid; one scholarship in the Divinity School; two scholarships to members of the families of Alumni; and two general scholarships.

**P. HUBER HANES, JR., SCHOLARSHIP FUND**

Established 1939; consisting of  $\frac{1}{5}$  of the income accruing annually to the P. Huber Hanes Fund; to be used for two scholarships for junior or senior students majoring in Business Administration.

**B. D. HEATH SCHOLARSHIP FUND**

Established 1903 by B. D. Heath; to be used for scholarship aid to worthy students from Union County, N. C.

**HIGH POINT SCHOLARSHIP FUND**

Established by gifts of members of the High Point Alumni Association, in connection with the celebration of the Centennial of Duke University; the income to be used for scholarship aid to students who are graduates of the High Point, N. C., High School.

**GEORGE M. IVEY SCHOLARSHIP FUND**

Established December 8, 1948, by gift of George M. Ivey; the income to be used for scholarship aid to deserving students in the Divinity School.

**HUNTER JONES SCHOLARSHIP FUND**

Established December 1947 by gift of Hunter Jones, '19, Durham, N. C.; the income therefrom to be used for scholarship aid to worthy students.

**HENRY HARRISON JORDAN MEMORIAL SCHOLARSHIP FUND**

Established December 1938 by gifts from George Way, B. Everett Jordan, '18, H. W. Jordan, Charles E. Jordan, '23, Mrs. H. C. Sprinkle, Jr., '24, and Frank B. Jordan, '27, in memory of their father, Reverend Henry Harrison Jordan, a member of the Western North Carolina Conference; the income to be used for scholarship aid to worthy students.

**JOSTEN'S SCHOLARSHIP FUND**

Contributions by Josten's; to be used currently for scholarship aid for worthy students.

**J. M. JUDD SCHOLARSHIP FUND**

Established 1922 by J. M. Judd, '95, of Varina, N. C., with directions that the earnings be allowed to accumulate until such time as they are sufficient to provide a four-year tuition scholarship.

**W. K. KELLOGG FOUNDATION SCHOLARSHIP FUND FOR NURSES**

Established by contribution by the W. K. Kellogg Foundation; the entire sum to be used currently for scholarship aid to students in training in the School of Nursing.

**FRANK S. LAMBETH SCHOLARSHIP FUND**

Established 1930 by bequest of Frank S. Lambeth, '80; the income to be used for scholarship aid to worthy students of Duke University.

**D. M. LITAKER SCHOLARSHIP FUND**

Established 1946 by gift of Charles H. Litaker, '28, in memory of his father. D. M. Litaker, '90, who for 47 years was an active minister in the Methodist Church; the income and, under certain conditions, a part of the corpus of the fund to be used for scholarship aid to undergraduate students, natives of the territory now embraced by the Western North Carolina Conference, who are preparing for the ministry.

**MARY ELIZABETH DUKE LYON SCHOLARSHIP FUND**

Established 1942 by Mary Washington Stagg, in memory of her mother, Mary Elizabeth Duke Lyon; the income to be used for scholarship aid to worthy students.

**THE McALISTER SCHOLARSHIP FUND**

Established December 1935 by Amelie McAlister Upshur in memory of her mother, Armantine Reynaud McAlister, and father, William Henry McAlister; the income to be used annually for a scholarship to one boy and one girl from each of the three states of North Carolina, South Carolina and Louisiana.

**MCCRACKEN MEMORIAL SCHOLARSHIP FUND**

Established 1945 by Thomas W. McCracken, '15; the income to be used for scholarship aid for worthy students.

**J. H. MCCRACKEN MEMORIAL SCHOLARSHIP FUND**

Established 1947 by J. H. McCracken, '22 and contributions from members of the First Methodist Church of Henderson, N. C., in memory of Reverend J. H. McCracken, '92, for many years a member of the North Carolina Conference; income to be used for scholarship aid.

**THE O. G. B. McMULLAN SCHOLARSHIP FUND**

Established 1913 by gift of O. G. B. McMullan of Elizabeth City, N. C.; the income to be used for scholarship aid to worthy students, preference to be given to residents of Perquimans and Pasquotank counties, N. C.

**R. A. MAYER SCHOLARSHIP FUND**

Established 1939 by gift of R. A. Mayer, '96, in memory of his father, Minor C. Mayer, and mother, Sarah R. Mayer, in connection with the Centennial celebration of Duke University, and supplemented subsequently by additional gifts; the income to be used for scholarship aid to worthy students, preference to be given to students from Mecklenburg County, N. C.

**W. H. MOORE SCHOLARSHIP FUND**

Established 1920 in memory of W. H. Moore, '71, by his wife, Mrs. W. H. Moore, and daughters, Mrs. W. E. Steele, Miss Maude Moore, Mrs. T. L. Parsons,

Mrs. J. H. Ihrie, and Mrs. J. LeGrand Everett; the income to be used for scholarship aid to worthy students.

#### THOMAS R. MULLEN, JR., SCHOLARSHIP FUND

Established April 5, 1949, by gift of T. R. Mullen in memory of his son; the income to be used for scholarship aid to worthy young men and women.

#### J. A. ODELL SCHOLARSHIP FUND

Established 1897 by gift of James A. Odell; the income to be used for scholarship aid to worthy students.

#### J. M. ODELL SCHOLARSHIP FUND

Established 1897 by gift of J. M. Odell; the income to be used for scholarship aid to worthy students.

#### W. R. ODELL SCHOLARSHIP FUND

Established 1940 by gifts from Fred C. Odell, '02, Mrs. Ralph M. Odell, Arthur G. Odell, '06, and others, in memory of William R. Odell, '75, for more than 50 years a member of the Board of Trustees of Duke University; the income to be used for scholarship aid to worthy students.

#### HENRY A. PAGE SCHOLARSHIP FUND

Established January 1942 by gift of Henry A. Page, Jr., '07 and Gertrude Wetherill Page, in memory of his father, Henry A. Page, for many years a member of the Board of Trustees of Duke University; the income to be used for scholarship aid to worthy students, preferably those preparing for the study of medicine.

#### EDWARD JAMES PARRISH SCHOLARSHIP FUND

Established 1921 by Rosa Brown Parrish, in memory of her husband, Edward J. Parrish; the income to be used for scholarship aid to worthy students.

#### JOHN T. RING SCHOLARSHIP FUND

Established 1919 by gift of S. G. Ring and family of Kernersville, N. C., in memory of John T. Ring, '16, who was killed in France during World War I; the income to be used for scholarship aid to worthy students.

#### T. V. ROCHELLE SCHOLARSHIP FUND

Established 1945 by T. V. Rochelle, '14, High Point, N. C., and supplemented annually; the income to be used for scholarship aid to a worthy and needy student who is a graduate of the High Point, N. C., High School.

#### SCHOLARSHIP FUND—ANONYMOUS

Established 1939 by an anonymous donor, and supplemented from time to time; the fund to be allowed to accumulate until such time as the donor may designate the use of the income for scholarship purposes.

#### J. RAYMOND SMITH SCHOLARSHIP FUND

Established 1939 by J. Raymond Smith, '17, Mt. Airy, N. C., in connection with the Centennial celebration of Duke University; the income to be used for scholarship aid to worthy students.

#### MARY ALYSE SMITH SCHOLARSHIP FUND

Established December 1946 by Mary Alyse Smith, '30, of Burlington, N. C., and her father, Marvin B. Smith, for scholarship aid to worthy North Carolina boys or girls.

#### THOMASVILLE SCHOLARSHIP FUND

Established 1940 by gifts of T. Austin Finch, '09 and J. Walter Lambeth, '16, by contributions made through the Centennial Fund; the income to be used for scholarship aid to worthy students.

**MARY NEWBY TOMS SCHOLARSHIP FUND**

Established 1906 by gift of Clinton W. Toms and supplemented from time to time by additional gifts; in May 1947, in connection with supplemental gifts to the Fund, it was established as a permanent endowment in memory of his wife, Mary Newby Toms; the income to be used for scholarship aid to worthy students, preference to be given to students from Durham and Perquimans counties, N. C.

**GEORGE W. WATTS SCHOLARSHIP FUND**

Established 1897 by gift of George W. Watts; the income to be used for scholarship aid to worthy students.

**WEATHERBY SCHOLARSHIP FUND**

Established 1912 by C. E. Weatherby, Faison, N. C.; the income to be used for scholarship aid to worthy students.

**WOMAN'S PANHELLENIC SCHOLARSHIP FUND**

Established May 25, 1949, by gift of the Woman's College Panhellenic Association; income to be used for scholarship aid for a rising senior in the Woman's College of Duke University.

### *Scholastic Awards and Prizes*

Need is a primary factor in awards made from the funds listed above. There are, in addition, scholarships and prizes based on scholastic merit and promise of leadership. In this group are the honorary scholarships financed through current funds of the University and the Angier Duke Regional Prizes.

Fifteen honorary tuition scholarships are awarded annually to undergraduates. Five are awarded to members of the sophomore class, five to members of the junior class, and five to members of the senior class on the basis of the scholastic work of the preceding year.

Nine Angier Duke Regional Prizes of \$750.00 each are awarded annually to six men and three women. Prizes are awarded for one year and are renewable from year to year for a maximum duration of four years, on the condition that the holder maintain a scholastic average in the upper quartile of his class and further that he show evidence of developing the qualities of leadership which served as the basis for the original selection. When all awards are renewed, there are thirty-six holders of prizes in residence. The total value to the recipient who qualifies for the maximum period is \$3,000.00.

Any resident in the state of North Carolina is eligible to apply regardless of where he or she prepares for college. A candidate may be a graduate of a secondary school, public or private, located within or beyond the borders of the state. Candidates must be eligible for admission to the freshman class of Trinity College, the College of Engineering, or the Woman's College in the ensuing academic year. A candidate must have attained scholastic standing in the highest twenty-five per cent of his or her class as of the closing date of his or her most recently completed semester.



The prizes are intended to encourage as students young men and women who give promise of becoming leaders in their chosen fields of endeavor. As potential leaders they should possess character, personality, intellectual integrity, vitality, and imagination. As students they should possess scholastic ability of a creative sort and minds that can digest and use the knowledge they acquire. The prizes are designed to stimulate young men and women who possess these traits to become citizens with a genuine interest in society and ability to influence and direct the course of affairs.

Applications for one of the prizes awarded either to men or women should be addressed to Mr. John M. Dozier, Office of the Secretary, Duke University, Durham, N. C. The deadline for the receipt of applications is December 15 of the year preceding the year of contemplated entrance.

### *Loans*

A number of loan funds have been established for the benefit of the students of Duke University. The most important and largest is the Angier B. Duke Memorial Student Loan Fund, which is administered through an advisory committee of officers of the University. The amount available to be loaned depends upon the income from investments and on the amount repaid on loans previously made to students. The same committee of officers administers the other endowed loan funds of the University.

The committee in approving loans selects those students who, from the standpoint of character, scholastic attainment, personality, and degree of financial need, are deserving of consideration.

The following regulations govern the operation of the loan fund program:

1. No loan will be made to a student who violates any of the regulations of the University or whose academic record is not satisfactory to the faculty.

2. As a general policy, a student must have spent one semester in residence before he is eligible to apply for a loan. During this period the loan committee will have an opportunity to acquaint itself with the worth and need of the individual applicants.

3. Loans will be made only to students who are taking approved courses of study that lead to a degree, and all loans must be arranged for not later than one week after the beginning of a semester.

4. Every applicant for a loan must obtain the signatures of two substantial people on a note which must be presented to the Treasurer of the University before any money will be advanced. Only one of these co-signers may be a member of a borrower's family.

5. No loan will be made to defray any expenses other than those incurred for tuition, fees, or room rent.

6. Interest at the rate of six per cent annually shall be charged for all loans, and the interest must be paid annually.

The University encourages borrowers to take advantage of its incentive plan. This plan enables them to realize a substantial saving through rebates which are given for repayment of long term loans prior to their maturity date.

7. Applications for loans should be made to the Loan Committee, Office of the Secretary, Duke University. A formal application for loan assistance may be made only on forms furnished in the Secretary's Office during the first week of each semester. The granting or withholding of a loan is a matter entirely within the discretion of the loan committee. A student is expected to use all other possible means of securing financial assistance before applying for aid from the Loan Fund.

#### ALUMNI LOAN FUND

Established 1915 by gift from the Alumni Association.

#### ANGIER B. DUKE MEMORIAL LOAN FUND

A charitable trust established during the year 1925 by B. N. Duke in memory of his son, Angier Buchanan Duke, for the stated purpose of assisting needy and worthy students in obtaining a college education.

#### PAUL M. BARRINGER BEQUEST FUND

Established 1932 by bequest from Paul M. Barringer; the income to be used in educating worthy young people; preference to be given those from Rowan County, N. C.

#### BYNUM BELOTE LOAN FUND

Established 1924 by E. T. Belote of Asheville, N. C., in memory of his son, Alfred Bynum Belote, student 1923-24.

#### A. D. BETTS LOAN FUND

Established 1919 by G. W. Vick, '11 and wife, in memory of Reverend A. D. Betts, a member of the North Carolina Conference; other contributions by W. A. Betts and Mrs. L. P. Wilkins; to be used for the aid of young men preparing for the ministry.

#### FANNIE CARR BIVINS MEMORIAL LOAN FUND

Established 1928 by the Alumnae Association in memory of Fannie Carr Bivins, '96; income to be loaned to young women students upon the recommendation of the Alumnae Council and approval by the dean of the Woman's College.

#### CHRISTIAN EDUCATION LOAN FUND

Established 1921 as a part of the Christian Education movement of the Methodist Church in North Carolina; for use as a general loan fund.

#### CLASS OF 1902 LOAN FUND

Established 1932 by the members of the class at their 30th Anniversary Reunion.

#### JESSE A. CUNINGGIM LOAN FUND

Established 1896 by J. A. Cuninggim, '90; to be loaned to young men preparing for the ministry.

**ALEXANDER EDENS MEMORIAL LOAN FUND**

Established 1920 by Lacy T. Edens, '24, Cora R. Edens, John A. Edens, L. D. Edens, '15, and L. F. Edens, in memory of Alexander Edens.

**GENERAL LOAN FUND**

Established 1900 by the North Carolina Conference, and supplemented from time to time by additional contributions by both the North Carolina Conference and the Western North Carolina Conference; to be used for no other purpose than to aid worthy students of the University.

**W. O. GOODE EDUCATIONAL LOAN FUND**

Established 1923 by W. O. Goode of the Western North Carolina Conference.

**MARY HESTER HAMBRICK LOAN FUND**

Established 1925 by W. R. Hambrick, Haldah Satterfield, John Jackson Hambrick, '16, and Robert T. Hambrick, '19, in memory of Mary Hester Hambrick, wife and mother; loans to be made to any needy students, preferably from Person County, N. C.

**B. D. HEATH LOAN FUND**

Established 1921 by B. D. Heath of Charlotte, N. C.; income to be used for students preparing for the ministry, preference to be given to one student annually from Union County, N. C.

**HOLLAND HOLTON MEMORIAL LOAN FUND**

Established March 1948 by friends and former students in memory of Holland Holton, '07, Professor of Education and Director of the Summer School of Duke University for many years; to be used in helping worthy young men and women in securing a college education.

**J. B. IVEY LOAN FUND**

Established 1922 by J. B. Ivey of Charlotte, N. C.; to be used for loans for worthy students.

**W. K. KELLOGG FOUNDATION LOAN FUND FOR NURSES**

Established 1942 by gift of the W. K. Kellogg Foundation; to be used for loans to students in the School of Nursing.

**MINISTERIAL EDUCATION LOAN FUND**

Established 1915 by the North Carolina Conference of the Methodist Church; to be used for loans to students preparing for the ministry.

**WILLIAM NEAL STUDENT AID FUND**

Established 1920 by John W. Neal in memory of his son, William Neal, student in 1919; to be used for loans to worthy and needy students.

**NORTH CAROLINA CONFERENCE BOARD OF CHRISTIAN EDUCATION LOAN FUND**

Established 1931 by gift of the Board of Christian Education of the North Carolina Conference; to be used for loans to students preparing for the ministry or other distinctive type of Christian service.

**W. N. REYNOLDS LOAN FUND**

Established by W. N. Reynolds, '86, of Winston-Salem, N. C.; to be used for loans to boys and girls of North Carolina seeking an education at Duke University; preference, however, to be given to graduates of the Nancy Cox Reynolds Memorial School, and the sons of employees of the R. J. Reynolds Tobacco Company, regardless of residence. In the discretion of the Executive Committee and under certain conditions, scholarships may be provided from the income from the fund.

**ROANOKE RAPIDS HIGH SCHOOL LOAN FUND**

Established 1925 by the graduating class of the Roanoke Rapids High School, Roanoke Rapids, N. C.; to be used for loans to students who are graduates of that school.

**ELLA WESCOTT TUTTLE LOAN FUND**

Established 1923 by D. H. Tuttle, '80, in memory of his wife, Ella Wescott Tuttle; to be used for loans to worthy young women seeking an education at Duke University.

**JOSHUA VICK MEMORIAL LOAN FUND**

Established 1920 by Mrs. J. W. Vick in memory of her husband, Joshua Vick; to be used for loans to needy students.

**WAKE COUNTY ALUMNAE LOAN FUND**

Established 1924 by the Raleigh Chapter of the Alumnae Association; to be used for loans to worthy women students.

**WINSTON-SALEM DISTRICT OF NORTH CAROLINA CONFERENCE LOAN FUND**

Established 1923 by the Winston-Salem District of the Western North Carolina Conference of the Methodist Church; to be used for loans to students preparing for the ministry from the Winston-Salem District.

**MARY POAGE WOOTEN LOAN FUND**

Established 1922 by John C. Wooten, '98, in memory of his wife, Mary Poage Wooten; to be used for loans to worthy students.

## *Student Employment*

Student employment offices are maintained to serve students who need part-time jobs. There are many opportunities both on the campus and in the city of Durham, and a considerable number of students each year help defray their college expenses by working.

The student employment offices maintain a list of current available jobs. They also keep a permanent record of the work activities of the self-help students and are prepared thereby to write, in the senior year of these students, recommendations for the Appointments Office and prospective employers.

Students may make application for part-time employment only after they have completed an application for admission and notification of acceptance has been given. The job application should be by letter prior to the reporting date for entrance, and a complete detailed job application form must be completed at the time of arrival at Duke University.

Those students in Trinity College and the College of Engineering in need of such employment may apply to Mr. J. M. Dozier, 205 Administration Building, West Campus. Students in the Woman's College should apply to the Assistant Dean of Residence, 108 East Duke Building, East Campus.

## *Living Accommodations for Men*

Craven, Crowell, and Kilgo Quadrangles on the West Campus are reserved for undergraduate men. Kilgo is assigned to freshmen. The three quadrangles contain thirty-one houses, each designated by a letter of the alphabet. Rooms are single, double, or arranged in suites of two rooms for four students. Each occupant of a double room is charged \$62.50 per semester; the occupant of a single room, \$87.50 per semester.

Rooms may be reserved only for applicants who have been officially accepted by the University. A deposit of \$25.00 is required for reservation. This deposit is deducted from the room rental charge at the time of registration for the semester; it is not refunded unless application for the refund is made sixty days prior to the registration date of the semester.

A resident student in order to retain his room for the succeeding semester must make application, accompanied by a reservation deposit of \$25.00. All rooms which have not been reserved on or before an announced date will be considered vacant for the succeeding semester and will be reserved in the order in which applications are made.

Rooms are rented for no shorter period than one semester or, in the case of a medical student, one quarter, unless by special arrangement with the Housing Bureau. A period of occupancy other than a semester or quarter and without special arrangement will be charged at a minimum rate of \$1.00 each day.

The exchange of rooms may be arranged at the Housing Bureau within fifteen days after the official opening of the semester or quarter of the school term. Thereafter a charge of \$2.00 will be made. Persons exchanging rooms without the approval of the Housing Bureau will be subject to charges for both rooms.

The authorities of the University do not assume responsibility for the persons selected as roommates. Each student is urged to select the roommate when the room is reserved.

Beds and mattresses (39" x 74"), tables, chairs, dressers, mirrors, and window shades are furnished by the University. The student supplies linens, blankets, pillows, and rugs.

Duke University is particularly eager that its students shall have the best dormitory life to be found in any institution. It has endeavored to provide buildings and equipment commensurate with this ideal. The institution asks and believes that in return each student will respond by arranging his personal belongings in an orderly manner and by caring for the buildings and furniture as he would do in the home of a friend. The following regulations are offered as a guide and a reminder that care is desired.

1. The student will be held responsible for any damage to the



room or furnishings during the rental period, and will pay for all damages caused by his neglect, misuse or abuse of any part of the University property. Inspections will be made throughout the college year to observe the condition of the rooms and to advise students concerning the care of rooms, if necessary.

2. Maids will prepare the rooms daily except Sunday, the service beginning promptly at 8:00 A.M. and ceasing at 1:00 P.M., thereby giving the student complete use of his room during the afternoon.

3. University furniture or furnishings must not be removed from the room in which they have been placed by the University.

4. Electric wiring, door locks, window screens, steam or water lines should not be changed or added, since the University supervises and makes such changes as are necessary and advisable.

5. Pictures, pennants, and clippings should be hung from the picture moulding and not tacked or pasted on walls or woodwork.

6. All trunks and heavy luggage will be stored in the trunk rooms. Janitors will remove the trunks from the hallways to the storage rooms when they are unpacked.

7. The exchange of rooms or keys should be arranged at the office. Any exchanges made otherwise will subject the participant to charges for both rooms.

8. The use or possession of intoxicating liquors, wines, or beer, and gambling in any manner in any of the buildings or on the grounds of Duke University are forbidden.

9. Animals shall not be kept in the dormitories.

10. Women are permitted in the dormitories only when accompanied by the University Hostess.

11. The use of dormitory rooms as a sales office or storeroom, or the solicitation for sales or gifts within the buildings or on the grounds is prohibited except by appointees of the University.

### *Living Accommodations for Women*

Undergraduate women are required to live in the residence houses of the Woman's College unless they are living with parents or close relatives in the city. In the case of a mature student the dean may, under special circumstances, make an exception. There are eight residence houses: Alspaugh, Aycock, Bassett, Brown, Giles, Jarvis, Pegram, and Southgate. All rooms in Jarvis and Southgate are double; in the other houses a few single rooms are available and, with the exception of Aycock, a limited number of suites consisting of a double room and one or two single rooms. A counselor, who is a member of the dean's staff, lives in each dormitory. It is her function to advise students and to assist the student House Council in the administration

of the house. Each occupant of a double room is charged \$62.50 per semester; the occupant of a single room, \$87.50 per semester.

Room reservations are made with the Dean of Residence. A deposit of \$25.00 is required for reservation. This deposit is deducted from the room rental charge at the time of registration for the semester; it is not refunded unless application for the refund is made sixty days prior to the official opening of the semester. A new student should pay the deposit as soon as she is accepted by the Committee on Admissions. If she fails to do so within ten days, her admission is cancelled. As an applicant may not reserve a room until she is accepted officially, she is requested not to send the reservation deposit before she receives notice of her admission. In the spring resident students reserve rooms for the next fall semester in accordance with a plan announced by the Dean of Residence. New students, as far as possible, are given their choice of the remaining rooms.

Rooms are rented for no shorter period than one semester, unless by special arrangement with the Dean of Residence. A period of occupancy other than a semester or a quarter and without special arrangement will be charged at a minimum of \$1.00 each day.

After a student has engaged a room, she is not permitted to move to another without the consent of the Dean of Residence. A student leaving one room and occupying another without permission may be charged for both rooms for the entire semester. No student is allowed to rent or sublet the room she has engaged to another occupant.

A new student who wishes a double room but has made no arrangement for a roommate will be assigned a roommate by the College. After a student has been a resident for one semester, she is responsible for obtaining and keeping a roommate. If a student occupying a double room does not obtain a roommate in the time required by the Dean of Residence—approximately two weeks after the beginning of the semester—she may be required to pay the rental consideration for the entire room.

Rooms contain only the principal articles of furniture. The student supplies her own linens, blankets, bedspreads, curtains, and study lamp. She may, if she wishes, provide additional articles such as scatter-rugs and small tables or bookcases, but she may not have large rugs or overstuffed furniture.

### *Dining Service*

The dining facilities on the West Campus include three cafeterias with multiple-choice menus, and the Oak Room where full meals and *a la carte* items are served. The cost for the academic year ranges from \$325.00 to \$450.00, depending on the tastes of the individual.

On the East Campus dining halls are located in the Union and in Southgate. Resident women may not board elsewhere than at these halls. The charge for board is \$175.00 per semester, payable at the time of registration.

It is hoped that present rates may be maintained. Charges, however, are necessarily dependent on costs of labor, foods, and materials, and some adjustment may be necessary.

Due to the large number of those served in the dining halls, it is not possible to arrange special diets for individual students. Special diet for the sick is served in the infirmary.

# Registration and Academic Regulations



**O**RIENTATION PROGRAM: All candidates for admission to the freshman class and all other students not in residence the preceding semester are expected to participate in the activities of Orientation Week. The program includes general ability, achievement, and placement tests, orientation lectures, physical examinations, social events, special religious services, registration, and enrollment.

The University considers the planning of a course of study to be of primary importance. A specially trained corps of advisers, therefore, is made available for consultation. The tests enable the counsellor to plan a program adapted to the ability, achievements, and goals of the individual student. New students who miss the whole or a part of the Orientation Program place themselves at a serious disadvantage at the very outset of their college career.

**MATRICULATION AND REGISTRATION:** Students in residence are required to submit to the appropriate dean, not later than the date of the spring registration, cards showing their selection of courses for the following year. An advance deposit of \$25.00 is required before the card may be submitted. These cards, approved by the dean, are filed for permanent record in the dean's office. Students who do not select their courses for the following year at the time appointed must pay a fee of \$5.00 to the Treasurer of the University before their course cards may be approved for the fall. Students whose course cards have been approved in the spring may matriculate by mail during the summer. The same regulations, with the exception of the advance deposit, apply to registration for the spring semester.

Students who register in either semester at a date later than that prescribed in the calendar of this Bulletin must pay to the Treasurer a fee of \$5.00. They are counted as absent in the work they have missed in the courses to which they are admitted, and these absences carry the same penalty as do other absences from the course. Changes in courses for reasons not arising within the University require a payment of \$1.00 for each change made. No course may be elected later than two weeks after the opening of the semester, and no student may be admitted to any class without an enrollment card.

## *General Academic Regulations*

**QUANTITY CREDIT AND COURSE LOAD:** The term of credit used is the semester hour which signifies one recitation a week throughout the semester. Two or three hours of laboratory work are equivalent to one hour of class work. Two semesters of seventeen weeks each constitute the academic year. For the degree of Bachelor of Arts or Bachelor of Science, credit for 124 semester hours is required; for a degree in Engineering, 148 semester hours.

The normal load of an undergraduate student in the Colleges of Arts and Sciences is five academic courses and 14 to 17 semester hours. The maximum number permitted is 19 semester hours, exclusive of physical education. In the College of Engineering the normal load is six academic subjects of 18 semester hours, exclusive of physical education. No student is permitted to take less than 14 semester hours of work without special permission from the dean nor to take more than the normal load of work unless his average grade in the preceding semester is higher than C.

**QUALITY CREDIT:** The requirements for the degree are computed not only in semester hours but also in quality points. Quality points are earned by a student on the basis of his grades: for an A he receives three quality points for each semester hour; for a B, two quality points for each semester hour; for a C, one quality point for each semester hour; for a D, no quality points; for an F, a loss of one quality point for each semester hour. (In the College of Engineering no loss is incurred by a grade of F.) Credit for at least 124 quality points is required for the degree of Bachelor of Arts or Bachelor of Science, and at least 148 quality points for a degree in Engineering.

**CLASS STANDING:** In the Colleges of Arts and Sciences a student to rank as a sophomore must have to his credit at least 26 semester hours and 26 quality points; as a junior, at least 56 semester hours and 56 quality points; and as a senior, at least 92 semester hours and 92 quality points. In the College of Engineering he must have, respectively, at least 30 semester hours and 30 quality points; 68 semester hours and 68 quality points; and 106 semester hours and 106 quality points.

In the Colleges of Arts and Sciences no senior may take for graduation credit any course open primarily to freshmen; and no junior may take for graduation credit more than one course open primarily to freshmen. A list of these courses is published in the Bulletin under "Courses of Instruction."

A student of the senior class, irrespective of his average grade in preceding years, must, in order to be eligible for graduation, complete the work of his senior year with a minimum average grade of C.



A tentative list of all candidates for the Bachelor's degree is prepared under the supervision of the dean as early in the college year as possible. A copy is furnished to each department of instruction for information and reference, and a copy is posted on the official bulletin board of the University for the information of the students concerned.

**RESIDENCE REQUIREMENTS:** A minimum of 30 semester hours of senior-level work in the Colleges of Arts and Sciences and 36 in the College of Engineering must be earned in residence. Students who meet this requirement but who still lack 6 to 8 semester hours in final fulfillment of requirements may take this work in another institution of approved standing, provided the course is approved by the head of the department concerned and by the dean.

A student who completes in a summer session the work required by the University for the Bachelor's degree will be granted the degree at the end of the summer.

#### **GRADING, ATTENDANCE, REPORTS, DISMISSAL, AND EXAMINATIONS:**

**GRADING:** Grades are reported so as to indicate one of four things:

(1) *Passed.* A grade of A, B, C, or D indicates that a student has passed a course. The work of this group of students is graded according to the following system: A, exceptional; B, superior; C, medium; D, inferior.

(2) *Failed.* A grade of F indicates that the student has failed the course, and in order to receive credit for the course he must repeat the work in class.

(3) *Incomplete.* (a) A grade of I may be reported by the instructor if for any reason he is unable to report the final grade at the regular time. (b) Incomplete courses must be completed before the close of the succeeding semester; otherwise the I is recorded as F, and the course must be repeated in class if the student is to receive credit for it.

(4) *Absent from final examination.* (a) The grade X indicates that the student was absent from the regularly scheduled examination. (b) A student absent from examination, if the absence has been excused by the dean of the college, may receive an examination upon the payment of a fee of \$3.00 to the Treasurer of the University. The instructor concerned arranges for the examination in cases where absences are excused. (c) A student with an X grade who has not obtained a passing grade before the end of the semester following that in which the X was incurred is regarded as having failed in the course concerned and must repeat the work in class in order to receive credit. (d) If a student's absence from an examination is not excused by the dean of the college, his grade for the course concerned is recorded as F.

If a student drops a course without permission from the dean, the grade for that course is recorded as F. If he drops with permission a course in which he is failing at that time, the grade for that course is recorded as F unless, in the judgment of the dean, circumstances do not justify this penalty.

**ATTENDANCE:** Regular and punctual attendance in class work is expected of all students. Weekly reports of all absences from class are to be made by each instructor and filed in the dean's office. No instructor has the authority to excuse a student from class attendance, and it is his duty to report all absences and tardinesses. The first three tardies in a given course are counted as one absence, and each succeeding tardy is counted as one additional absence.

To provide for absences due to brief illness and other absences for necessary reasons, one absence per semester hour credit may be incurred in each course during each semester.

Absences due to continuous illness of at least four days' duration and authorized absences for representation of the University may be excused, provided foresight has been used in previous absences.

Sophomores, juniors, and seniors who, in a normal schedule make averages of B or above in the preceding semester will be allowed two absences per semester hour but will, in all other respects, be subject to the same regulations as other students.

All absences immediately before and after announced holidays are counted as double absences.

For each unexcused excessive or consecutive absence the student incurs the loss of quality points in proportion to the number of such absences taken: one quality point for the first absence, two for the second, and three for the third. When the third unexcused, excessive, or consecutive absence is incurred, the student is debarred from the course with the loss of six quality points.

When a student's course load is reduced, because of unexcused absences, to less than 12 semester hours, he is required to withdraw from the University.

**REPORTS:** Reports on class attendance and proficiency in academic work are sent to parents or guardians after the examinations at the end of each semester. In addition, reports on freshmen are mailed at each mid-semester period.

**DISMISSAL:** A student of the freshman class to remain in the University must pass at least 6 semester hours of work in his first semester and 18 semester hours in his first year. All other students must pass at least 9 semester hours each semester. A student who is ineligible to reenter in September is ineligible to enter the Summer Session.

**EXAMINATIONS:** Final examinations are held in all subjects in January and May.

**DEFICIENCIES IN COMPOSITION:** The following regulations have been adopted by the Faculty:

1. Any student who must take English 1 and whose score in the English placement test indicates that he is not yet ready for English 1 must earn a passing grade in English L before being permitted to enter English 1.

2. In the fall of his or her junior year every student of Trinity College and of the Woman's College must take an examination in English usage. The regulation does not apply to students of the College of Engineering, which has special course requirements in English composition in addition to English 1-2. Students with irregular schedules resulting from acceleration or transfer to Duke after the fall of their junior year should take the examination in the fall of the year most nearly approximating the fifth semester. Students who are proved deficient by this examination will be required satisfactorily to complete a special non-credit laboratory course in remedial English.

3. Whenever the work of a student in any course is unsatisfactory because of errors in English, the instructor may report the student to the dean, who will require him to enroll in remedial English until, in the opinion of the director of the Remedial Laboratory, the deficiency is removed.

4. All instructors are requested to advise their students each semester concerning this regulation.

# The Libraries



THE UNIVERSITY LIBRARIES, with more than 1,000,000 volumes and 1,250,000 manuscripts, provide exceptional resources and facilities for study and research by undergraduate and graduate students, and by visiting scholars. Between 30,000 and 40,000 volumes are added annually, and seventy foreign and domestic newspapers and 3,600 periodicals are received currently. A large collection of microfilms of rare books, newspapers, and periodicals is available.

A Chemistry library (15,000 volumes), Physics-Mathematics library (14,000), and Biology-Forestry library (42,000) are housed for convenience of use in the buildings of these departments. The libraries of the Schools of Divinity (50,000), Law (92,000), Medicine (50,000) and of the College of Engineering (15,000) are also shelved in the buildings of these schools, all on the West Campus.

The General Library, centrally located on the West Campus, has 650,000 volumes in all other fields. It is the principal working and research collection for students in the humanities and social sciences. The collection has been developed with care to support the work of the undergraduate curriculum and the more specialized needs of graduate and post-doctoral research. Basic collections of source materials are supported by the important publications of criticism and discussion. There are large collections of general periodicals, of the publications of European Academies, and of public documents of state, federal, and foreign governments, and international organizations. The newspaper collection (about 13,000 volumes and 2,000 rolls of microfilm) is particularly strong in papers from the states of the Atlantic seaboard, both North and South, with extensive holdings of Ante-bellum and Civil War papers of North Carolina, South Carolina, and Virginia.

The manuscript collections, relating chiefly to the South Atlantic region with particular strength in the Confederate period, is most extensive in the field of history, but it contains important source material on all phases of social and economic life as well as politics. There are groups of manuscripts in American and British literature, with a notable Walt Whitman collection, and a number of important mediaeval manuscripts, chiefly lectionaries and copies of the New Testament. Among many special collections of note are the Guido Mazzoni library of Italian and comparative literature, the Lanson Collection of French literature, Goethe and Dante collections, collections on Brazil, Peru, Ecuador, and the Philippines, the Holl Church history

library, eighteenth-century English poetry and prose, a Socialist collection, the Arents tobacco collection, the Thomas collection of books on Chinese history and culture, the George Washington Flowers Collection of manuscripts, books, newspapers, and pamphlets dealing with all phases of Southern history, and the Trent collection of Walt Whitman books and manuscripts.

The General Library building, which was modernized and enlarged in 1949, contains many special features which contribute to the preservation of materials and facilitate their use by students and research workers. The book stacks, manuscripts, and rare book storage and reading rooms are air-conditioned. Two hundred and fifty carrels, some completely enclosed, are available in the stacks as places of study. Graduate and advanced students are permitted free access to the stacks. On the ground floor are a newspaper reading room with a battery of microfilm reading machines and a microphotography laboratory with facilities for reproducing printed and other material. On the same floor are the manuscripts reading room and storage area. The first floor has periodical, graduate, and undergraduate reading rooms, the latter opening into an attractively furnished small library for recreational reading. In the north wing is the rare book reading room, with adjoining special collection rooms and storage stacks. The second floor houses the general reference and reading room, the circulation department and Main Loan Desk, and the Public Card Catalog, a union catalog of books in all the University libraries. There is also a catalog of the library of the University of North Carolina at Chapel Hill, whose books are available through inter-library loan.

On the East Campus, the Woman's College Library, in its attractive Georgian building, contains nearly 85,000 volumes in an open stack collection, chiefly those most constantly needed in the undergraduate work of women students. A reference and general reading room, the Thomas Memorial Room, and the Booklovers' Room, with open shelves of books for general reading, provide comfortable and attractive space for reading and study.

A "Student's Guide to the General Library" and a brochure on "The Library of Duke University" which describes the building and collections in greater detail are available on request addressed to the Librarian of the University.



# Reserve Officers Training Corps



THROUGH the Naval and Air Force Reserve Officers Training program the University is cooperating with the Department of National Defense in the effort to provide a steady supply of well-educated officers for the active and reserve forces of the Nation.

## *The Naval Reserve*

Scholarships are awarded to candidates selected as a result of an annual nation-wide test and selection procedure. These men are designated as Regular NROTC Students and are appointed Midshipmen, USNR. The scholarship covers the cost of tuition, fees, and textbooks. NROTC Midshipmen receive retainer pay at the rate of \$600 per year. The Navy furnishes necessary uniforms and equipment.

Normally students will attend college for four years while in the NROTC. They may take any course leading to a baccalaureate or higher degree, except that Midshipmen entering after 1950 may not pursue courses leading to degrees in pre-medicine, pre-dentistry, pre-theology, medicine, dentistry, or theology. They must include in their courses of study 24 semester hours of Naval Science plus certain minimum requirements in mathematics, physics, and English. They will wear the uniform only when engaged in drills or other Naval Activities prescribed by the Professor of Naval Science and, except for the ordinary requirements of gentlemanly behavior, will be subject to Naval discipline only at those times. They are required to make two summer cruises at sea and to attend one summer training period of amphibious and aviation indoctrination. Upon graduation Regular NROTC students must accept a commission as Ensign, USN, or Second Lieutenant, USMC, if offered, and will be ordered to active duty for a period of 15-24 months. After fifteen months' service those so desiring may request an additional year of active duty and apply for permanent retention in the services as career officers. Those who do not desire to remain as career officers must accept a commission in the Reserve of the appropriate service and remain in the Reserve at least until the sixth anniversary of their first commission. Reserve Officers are not called to active duty except during a declared emergency of war, unless at their own request.

A second type of officer candidate in the NROTC is the Contract NROTC Student. These candidates are selected from qualified students regularly enrolled in Duke University. They have the status of civilians who have entered into a mutual contract with the Navy. They do not receive the compensation or benefits paid the Regular

NROTC Student, but are furnished uniforms, Naval Science textbooks and equipment; and a subsistence allowance (currently 90 cents per day) during the final two years of NROTC training. Contract students make one training cruise, during which they receive active duty pay. Contract students on graduation must accept a commission in the Naval or Marine Corps Reserve, but may, if they so desire and their services are required, request active duty and a commission in USN or USMC. If ordered to active duty they then are eligible for selection as career officers under the same provisions as graduating NROTC regulars.

Under the provisions of the Selective Service Act of 1948, Regular NROTC Students who serve a period of active duty as an integral part of their training under Public Law 729 are deferred from Selective Service. Contract students, by virtue of an agreement to accept a commission on graduation and to serve on active duty if required, are deferred from Selective Service. All NROTC Students are considered on *inactive* duty in the Naval Reserve while in college, and such service may *not* be counted for exemption or deferment should a student be separated from the program for any reason.

### *The Air Force Reserve*

The unit functions as a regular department of instruction known as the Department of Air Science. It selects and trains students who possess the requisite character, intelligence, desire, and sense of duty to become Air Force Officers.

For enrollment in the Basic Course (freshman and sophomore years) the student must: be a male citizen of the United States; be physically qualified under standards prescribed by the Air Force (due allowance will be made for defects which are correctible prior to the student's eligibility for appointment as a commissioned officer); be accepted by the institution as a regularly enrolled student; be not less than 14 years of age and not have reached 23 years of age at the time of enrollment; and successfully complete such general survey and screening tests as may be prescribed.

For enrollment in the Advanced Course (junior and senior years) the student must: have successfully completed the Basic Course or have had at least one year of honorable service in the Armed Forces of the United States; execute a written agreement with the government to complete the Advanced Course, contingent upon remaining in school, and to attend the Advanced Summer Camp at the time specified; not have reached 27 years of age at the time of initial enrollment in the Advanced Course; successfully complete such general survey and screening tests as may be prescribed; and be selected by the Professor of Air Science and Tactics and the appropriate authority of the institution.

All uniforms, texts, and training equipment required for the Air Science Course are furnished at government expense, and students are paid a total of approximately \$600.00 for the two years of the Advanced Course.

Upon graduation and completion of the Advanced Course, students will be offered commissions as Second Lieutenants in the Air Force Reserve. Outstanding students will be offered lifetime careers in the Regular Air Force. Flying training is available after graduation for those who desire it and are physically qualified.

Students in the Basic Course may be deferred from Selective Service upon satisfactory completion of one semester of Basic Air Science. Advanced students are eligible for deferment as soon as they are enrolled formally in the Advanced Course. When quotas for deferment are less than the number of eligible enrollees, selection for deferment is made by a board composed of representatives from the AFROTC and the University.

## The Bureau of Testing and Guidance



THE UNIVERSITY maintains a Bureau of Testing and Guidance in which is centralized the counseling and guidance program for students. It is responsible for the administration of various testing programs throughout the year. Included in the responsibilities of the Bureau are admissions tests, placement tests, vocational series, other specialized programs including the Graduate Record Examination, the Navy College Aptitude Test, the Medical College Admissions Test, and specific testing programs requested by the schools and colleges within the University. The Bureau likewise maintains facilities for research projects in the field of guidance and testing and offers such services to schools and individuals outside the community as its facilities permit. Requests for further information should be addressed to The Director, Bureau of Testing and Guidance, Duke Station, Durham, North Carolina.

## Appointments Office



THE APPOINTMENTS OFFICE is a service agency designed to aid graduates in solving the problem of post-college employment. Its primary function is to serve as an intermediary between students and prospective employers. It acquaints students with possibilities in business and professional fields; it assembles comprehensive records on

each registrant and makes these records available to appropriate representatives; and it arranges interviews with prospective employers. The data assembled for individual records include academic achievement, training, experience, extracurricular activities, honors, and potential ability as revealed by scores on mental, personality, and interest tests. On occasion additional information of a specialized nature is secured. Confidential letters of recommendation are incorporated in the file of each registrant. The Office initiates contacts for students or co-operates with students who make contacts through personal efforts or through various departments of the University. It aids the registrant in directing his search to a field appropriate to his aptitude, training, and interest.

There are two major divisions of the Office: the Commercial Division, which handles all matters involving contacts with business and professional areas not related to formal education; and (2) the Educational Division, which concerns itself with teaching and school administration positions at all levels. Students and alumni may register with either or both of these divisions.

The Office receives more calls for qualified personnel than it can supply from its registrants—in 1949-1950 it was able to satisfy less than one-third of the 2,700 requests made by prospective employers. It is to the mutual advantage of the students and the Office that a complete record of registrants be assembled by the fall of the senior year.

## The Summer Session



THE SUMMER SESSION at Duke University makes available to Duke undergraduate students and to undergraduates from other universities and colleges a notable program of instruction in many fields of knowledge both academic and professional.

Undergraduates in Duke University who desire to accelerate their programs may complete the work for a degree in three years by attending two and one-half summer sessions.

Undergraduates from other colleges and universities may enjoy the special advantages of summer instruction at Duke and transfer their earned credits to their own institutions.

The Summer Session of 1951 will include two six-week terms: Term I, June 12 to July 21; Term II, July 21 to August 31. By attending both terms it is possible for a student to earn as many as twelve semester hours of credit.

Instruction of interest to undergraduates will be offered in the

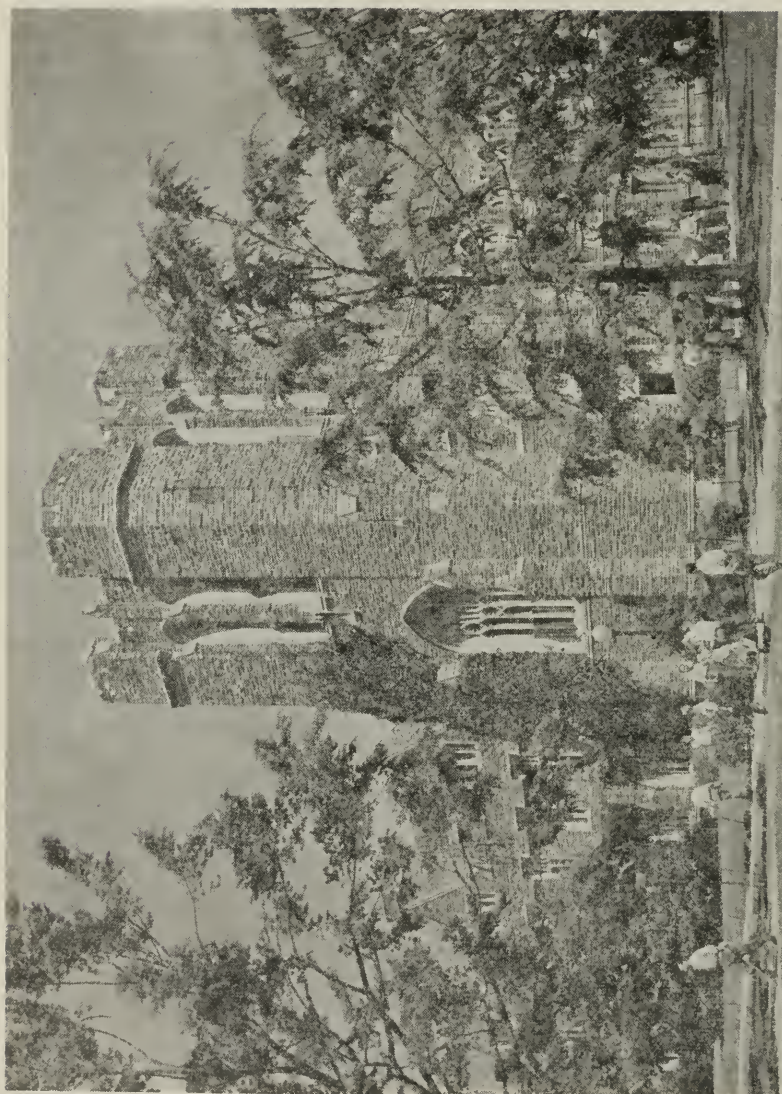
summer of 1951 in the following departments and colleges: Aesthetics, Art and Music; Botany; Chemistry; Economics; Education; Nursing Education; Engineering; English; Forestry; French; Geology; German; Greek; Health and Physical Education; History; Latin and Roman Studies; Mathematics; Philosophy; Physics; Political Science; Psychology; Religion; Sociology; Spanish; and Zoology.

Distinctive features of Summer Session instruction are provided by the program in marine biology offered at the Duke Marine Laboratory, Beaufort, N. C., and by the School of Spanish Studies held in Southgate Hall on the campus of the Woman's College, Durham, N. C. The School of Spanish Studies (1951 will be its tenth session) offers unusual opportunities to students both undergraduate and graduate who seek proficiency in the active use of the language. Students and faculty live and board in the Residence (Southgate) and share in a Hispanic social program. Among the faculty are native professors and native student assistants. Everyone speaks Spanish. Courses are offered concurrently on the undergraduate and the senior-graduate level so that the student while acquiring oral facility in everyday living may also satisfy course requirements toward a degree.

While the basic purpose of the Summer Session is to serve the academic and the professional requirements of those who are interested in their own educational advancement, the University recognizes the need of, and provides for, a varied recreation program both athletic and social.

Undergraduates of Duke University both men and women who plan to attend the Summer Session should enroll with the Dean of their own college in Duke University. Undergraduates in other universities or colleges who seek transfer credits should apply directly to the Director of the Summer Session, Duke University, Durham, N. C.





THE GENERAL LIBRARY

# Requirements for Degrees



DUKE UNIVERSITY offers, in Trinity College, the Woman's College, and the College of Engineering, courses of study which lead to the degrees of: Bachelor of Arts, Bachelor of Science, Bachelor of Science in Civil, Electrical, or Mechanical Engineering, and Bachelor of Science in Nursing Education.

## *Bachelor of Arts*

The requirements for the degree of Bachelor of Arts are based on the principle that the student will derive the maximum benefit from his college work if his program includes a broad distribution of studies among representative fields of culture, concentration within a special field, and some work of his own choice.

For graduation with the degree of Bachelor of Arts, the following course work must be completed in accordance with the academic regulations as stated on pages 71-74 of this Bulletin.

UNIFORM COURSE REQUIREMENTS		S.H.
English .....	6	
Foreign Language .....	6-18	
Natural Science .....	11	
Religion .....	6	
Social Science and History .....	12	
Literature, Music, Art, and Philosophy .....	6	
Physical Education .....	4	
MAJOR AND RELATED WORK .....	42	
ELECTIVES TO MAKE A TOTAL OF .....	124	

These requirements are described in detail below. Descriptions of courses can be found under "Courses of Instruction, Trinity College and the Woman's College" on pages 96-165 of this Bulletin.

ENGLISH, 6 s.h.—This requirement is met by the completion of English 1-2. Students who demonstrate proficiency in English usage may be allowed to substitute 55 or 56 for English 1.

FOREIGN LANGUAGE, 6 to 18 s.h.—This requirement is met by the completion of the third college year of a foreign language. The languages which meet this requirement are French, German, Greek, Latin, Spanish. The number of courses required depends on previous training and ability as shown on placement tests. Students presenting for entrance four units of Latin may, however, satisfy the language requirement by the completion of the third college year of Latin or by two years of Greek. In exceptional cases, on the recommendation of the language department concerned and with the approval of the Dean, a student who has completed the second college year of one language may satisfy the requirement by the completion of the first year of another language.

**NATURAL SCIENCE, 11 s.h.**—To satisfy this requirement a student must complete a laboratory course (8 s.h.) in one of the natural sciences (botany, chemistry, geology, physics, zoology), and one course of at least 3 semester hours selected from mathematics (except Mathematics 1), logic and scientific methodology (Philosophy 48, 104, and 242), or from the sciences listed above.

**RELIGION, 6 s.h.**—To meet this requirement 6 semester hours must be chosen from Religion 1, 2, 51, 52, 101, 103, 104, 114, 130, 132, 181, 182, 183, or Philosophy 99.

**SOCIAL SCIENCE AND HISTORY, 12 s.h.**—(a) Students who present for entrance two acceptable units of history can satisfy this requirement by 12 semester hours chosen from History 1-2, or 51-52, Economics 51-52, Education 84, 105, Political Science 61-62, Psychology 91-92, or Sociology 91-92. Six of the 12 semester hours must be taken in economics, history, political science, or sociology. (b) Students who do not present for entrance two acceptable units of history must take History 1-2, or 51-52, and 6 semester hours selected from the other social sciences named in (a).

**LITERATURE, MUSIC, ART, AND PHILOSOPHY, 6 s.h.**—This requirement can be satisfied by a total of 6 semester hours in courses in English or American literature, foreign literature courses numbered above 100, literature courses in translation, courses in aesthetics, art, music, or Philosophy 91, 93, or 94.

**PHYSICAL EDUCATION, 4 s.h.**—In Trinity College physical education is required during each of the first two years and is normally completed by the end of the sophomore year; in the Woman's College it is required during the first three years and is normally completed by the end of the junior year.

**MAJOR AND RELATED WORK, 42 s.h.**—Prior to registration in the spring of his sophomore year, each student is required to choose his major field and confer with his departmental adviser on the requirements for major and related work.

The major work consists of 18 to 24 semester hours in one department exclusive of courses open primarily to freshmen.\* The choice of courses must be approved by the major department. The related work must be taken in at least two other departments and is selected subject to the approval of the major department and the dean; it may not include more than one course of 6 or 8 semester hours open primarily to freshmen. Courses satisfying the uniform course requirements may also be counted toward the requirements in major and related work. Information on specific departmental requirements for major and related work can be found in the section "Courses of Instruction" (pages 96-165), and several programs of study designed as preparation for professions are given in the next section.

The total amount of work that a student may take in any one department toward the Bachelor of Arts degree is limited to a maximum of 36 semester hours. In the Department of Aesthetics, Art, and Music, and the Department of Philosophy, the Department of English, the Department of Economics and Business Administration, and the Department of Romance Languages, a total of 54 semester hours is permitted, provided a total of not more than 36 semester hours is taken in any one division of the department.

**ELECTIVES.**—In addition to the uniform courses required and major and related work, other courses must be completed to make a total of at least 124 semester hours, including 4 semester hours of physical education.

Students whose courses of study permit may elect a maximum of 18 semester hours in engineering, forestry, or medical science. The courses elected in these subjects must be approved by the major department and the dean of the college.

## CHOICE OF A MAJOR FIELD

The requirement of 42 semester hours in a major field is based pri-

\* Courses open primarily to freshmen are numbered from 1 to 49 and a list of them is given under "Courses of Instruction, Trinity College and the Woman's College."



marily on the belief that some advanced study in one subject, together with related work in allied subjects, is a valuable part of a general education. The selection of a major field usually depends on a student's cultural or vocational interests.

### GENERAL PROGRAM

The General Program is designed for the student whose primary interest is in one of the liberal arts subjects. The subjects in which major work is offered are: art, botany, chemistry, economics, education, English, French, geology, German, Greek, history, Latin, mathematics, music, philosophy, physics, political science, psychology, religion, sociology, Spanish, zoology.

### SPECIALIZED PROGRAMS

The student who has chosen a vocation may wish to include specialized training in his program. The following programs of study in preparation for various professions or professional schools are outlined for the guidance of the student.

**BUSINESS:** The student who plans to engage in some form of business may choose his major work in economics or he may take the following specified courses to satisfy the requirements for the major and related work.

Freshman Year: Economics 11 (recommended but not required), Mathematics 5 and 16.

Sophomore Year: Economics 51-52, Economics 57-58, Political Science 61-62.

Junior and Senior Years: Economics 138, Economics 143, Economics 144, Economics 153, Economics 171-172 or Economics 105 and 158, Economics 181-182, Economics 189. Three hours of the economics courses shown in Economics Major Section B.

In addition to the courses specified above, 9 semester hours from other courses in the Department of Economics and Business Administration must be elected.

A student planning to take the examination to qualify as a Certified Public Accountant may, with the permission of the Department of Economics, substitute courses in accounting (including Economics 184) for courses 11, 138, 144, 189, and for 3 semester hours of the electives in Section B (p. 113).

**RELIGIOUS WORK:** A student who plans to enter the ministry or other religious work should have a broad liberal arts training. He may major in religion or any other subject. It is suggested that the student include in his program as many as possible of the following courses.

Freshman Year: Religion 1-2, History 1-2.

Sophomore Year: Religion (6 s.h.), Economics 51-52 or Political Science 61-62, English Literature (6 s.h.).

Junior Year: Religion (6 s.h.), Psychology 91-92, English 151-152.

Senior Year: Religion (6 s.h.), Sociology (6 s.h.), Philosophy (6 s.h.).

**SOCIAL WORK:** The student who plans to pursue professional studies in preparation for social work (such as family welfare, child welfare, public welfare, probation and parole and similar forms of neighborhood and community work) should take his major work in sociology, with related work in other social sciences. The following courses should be included:

History 1-2, or 51-52.  
Economics 51-52.  
Political Science 61-62.  
Psychology 91-92.  
Philosophy (6 s.h.).

Zoology is recommended for the required course in Natural Science. Electives should be chosen mainly from history, economics, political science, education, sociology, philosophy, psychology, or religion.

**TEACHING:** The program for students who intend to teach is designed to prepare for positions both in the elementary school and in the high school. All prospective teachers, regardless of the type of school in which they expect to teach, (a) must take a sequence of four basic courses in the Department of Education, namely, Education 84, 88, 103, and 118; (b) should read carefully the certification requirements of the state in which they plan to teach and should arrange their programs with their departmental adviser accordingly; and (c) should begin early the required sequence of courses in education, taking Education 84 and/or 88 first, preferably in the first semester of the sophomore year.

**HIGH-SCHOOL TEACHING.** Students may meet certification requirements by qualifying in one teaching subject, but they are strongly advised to choose their electives to meet requirements in two teaching subjects. In any case their programs must include courses in education and in other subjects sufficient to satisfy the certification requirements of the state in which they will teach. Courses in materials and methods should be reserved for the senior year; and courses in observation and practice teaching may be taken *only* in the senior year.

**ELEMENTARY SCHOOL TEACHING.** Students preparing to teach in the elementary school must complete the following specific requirements: Education 101-102 and 142, History 91 or 92, and Political Science 63 or 61-62, Economics 115, Economics 109, or 118, or 120, Music 151, Physical Education 102, and Health Education 112. Education 101-102 (which includes observation and practice teaching) should be reserved for the senior year.

**PREPARATION FOR GRADUATE SCHOOL:** The student who plans to enter a graduate school of arts and sciences for advanced study should consult an adviser in the field of the proposed advanced study concerning suitable preparation. Most graduate schools have definite requirements in foreign languages for all students. Candidates for the



degree of Doctor of Philosophy are required to pass reading examinations, usually in German and French. In some cases other languages may be substituted. As soon as practicable, the student should ascertain the requirements of the particular graduate school he desires to enter.

**PREPARATION FOR LAW SCHOOL:** Students who plan to study law may select their major work in any field. The following courses are recommended:

Economics 51-52, 57-58.  
English 55-56.  
History 1-2 or 51-52, 105-106.  
Philosophy 48 and 91.  
Political Science 61-62.  
Sociology 91-92.

Special advisers are available for pre-legal students. The names of these advisers may be secured at the dean's office.

**PREPARATION FOR MEDICAL OR DENTAL SCHOOL:** Students planning to enter a medical or dental school should select the following foundation courses for the study of medicine:

Chemistry 1-2, 61, 151-152.  
English 55-56.  
Mathematics 5, 6.  
Physics 51-52.  
Zoology 1-2, 53.

Pre-medical and pre-dental students may take their major work in a single department, or they may satisfy the requirement for the major and related work by the completion of at least 13 semester hours chosen from the following courses in addition to the 54 semester hours of foundation courses above:

Botany 101 or Zoology 110.  
Chemistry 70.  
Mathematics 51, 52.  
Physics 125, 126.  
Psychology, 2 courses from 109, 111, 119, 130, 212.  
Zoology 92, and 152 or 271.

Science courses numbered above 100 may be substituted for these with the approval of an adviser for the pre-medical group and the Dean. Students who plan to include psychology in their 13 hours should complete Psychology 91-92 in their sophomore or junior years. When the major work is in science, electives in social sciences or humanities are recommended. It is advisable to choose German or French as the foreign language. Each pre-medical student should ascertain the requirements and recommended courses of the medical school that he expects to attend.

Special advisers are available for pre-medical and pre-dental students. The names of these advisers may be secured at the dean's office.

## *Bachelor of Science*

For graduation with the degree of Bachelor of Science, the following course work must be completed in accordance with the academic regulations as stated on pages 71-74 of this Bulletin.

UNIFORM COURSE REQUIREMENTS	S.H.
English .....	6
French and German (second college year) .....	12-24
Mathematics .....	6
Natural Science .....	8
Economics, History, or Political Science .....	6
Religion .....	6
Restricted Elective .....	6
Physical Education .....	4
MAJOR AND RELATED WORK .....	48
ELECTIVES TO MAKE A TOTAL OF .....	124

These requirements are described below. Descriptions of courses can be found under "Courses of Instruction, Trinity College and the Woman's College" on pages 96-165 of this Bulletin.

**ENGLISH, 6 s.h.**—This requirement is met by the completion of English 1 and 2. Students who demonstrate proficiency in English usage may be allowed to substitute English 55 or 56 for English 1.

**FRENCH AND GERMAN.**—Bachelor of Science candidates must complete at least the second college year, or equivalent as determined by examination, of both French and German.

**MATHEMATICS, 6 s.h.**—This requirement may be met by completion of Mathematics 5 and 6.

**NATURAL SCIENCE, 8 s.h.**—This requirement can be satisfied by courses in one of the natural sciences, namely, botany, chemistry, geology, physics, and zoology. The courses must include laboratory work, and may not be counted as part of the major or related work.

**ECONOMICS, HISTORY, OR POLITICAL SCIENCE, 6 s.h.**—A student who does not present for entrance two acceptable units of history (exclusive of other social work) must take a course in history; otherwise, he has his choice of economics, history, or political science. The courses that will satisfy this requirement are listed under "Courses of Instruction."

**RELIGION, 6 s.h.**—To meet this requirement 6 semester hours must be chosen from Religion 1, 2, 51, 52, 101, 103, 104, 114, 130, 132, 181, 182, 183, or Philosophy 99.

**RESTRICTED ELECTIVE, 6 s.h.**—To meet this requirement 6 semester hours in addition to other uniform course requirements must be selected from aesthetics, art, economics, education, English, foreign language, history, music, philosophy, political science, religion, and sociology.

**MAJOR AND RELATED WORK, 48 s.h.**—Major and related work consists of 48 semester hours in the Natural Sciences. This work must be selected from the departments of botany, chemistry, geology, mathematics, physics, psychology, and zoology. The major work consists of not less than 24 semester hours in one department, the choice of courses being subject to the approval of the department. The major work does not include courses primarily open to freshmen. The related work is taken in at least two other departments and is selected subject to the approval of the major department. It may not include more than one course primarily open to freshmen. A minimum of 14 semester hours of related work is required, 8 hours of which must be in laboratory science. Further information concerning the requirements for the major and related work in the various departments will be found under "Courses of Instruction" (pages 96-165).

**ELECTIVES.**—In addition to the above, the student must elect sufficient courses to complete, with an average grade of "C," the 124 semester hours necessary for graduation.

Students whose courses of study permit may elect a maximum of 18 semester hours in engineering, forestry, or medical science. The courses elected in these subjects must be approved by the major department and the dean of the college.

The total amount of work that a student may take in any one department toward the Bachelor of Science degree is limited to a maximum of 40 semester hours.

On or before the date announced for the spring registration, every sophomore in this group should select his major department in the Natural Sciences and arrange, under the guidance of an adviser in the major department, his program of studies for the following year. He should obtain the adviser's written approval of all courses selected in the division before submitting his program to the dean for final action. In like manner, each upperclassman will recheck the courses in his division of concentration each year with a representative of his major department.

## *Bachelor of Science in Civil, Electrical, or Mechanical Engineering*

The studies for degrees in Engineering, designed for students who are preparing for civil, electrical, or mechanical engineering as a profession, lead to the following degrees: B.S. in C.E., B.S. in E.E., and B.S. in M.E. All curricula of the College of Engineering are fully accredited by the Engineers' Council for Professional Development.

### GROUPS OF STUDIES FOR THE DEGREE OF BACHELOR OF SCIENCE IN CIVIL, ELECTRICAL, OR MECHANICAL ENGINEERING

See the *Bulletin of the College of Engineering* for courses substituted by Air ROTC and Naval ROTC students in the following curricula.

#### *Uniform Freshman Year*

FIRST SEMESTER				SECOND SEMESTER			
			S.H.				S.H.
Math	5	College Algebra .....	3	Math	50	Analytic Geometry .....	3
Math	6	Trigonometry .....	3	Math	51	Calculus I .....	3
Chem	1	Chemistry .....	4	Chem	2	Chemistry .....	4
Engl	1	English .....	3	Engl	2	English .....	3
Hist	E1	History .....	3	Hist	E2	History .....	3
G.E.	1	Drawing .....	2	G.E.	2	Descriptive Geometry .....	2
		Physical Education .....	1			Physical Education .....	1
			<hr/>				<hr/>
			19				19

## DUKE UNIVERSITY

## GROUP ONE

## CIVIL ENGINEERING

*Sophomore Year*

FIRST SEMESTER			SECOND SEMESTER		
		S.H.			S.H.
Math 52	Calculus II	3	Math 53	Calculus III	3
Phys 51	Physics	5	Phys 52	Physics	5
Econ 51	Economics	3	Econ 52	Economics	3
G.E. 57	Statics	3	G.E. 107	Strength of Materials	3
C.E. 61	Surveying	4	C.E. 62	Surveying	4
	Physical Education	1		Physical Education	1
		19			19

*Junior Year*

Engl 93	Advanced Composition	3	Engl 151	Public Speaking	3
G.E. 58	Dynamics	3	G.E. 128	Hydraulics	3
C.E. 131	Structures	5	C.E. 132	Structures	5
C.E. 113	Route Surveying	3	C.E. 118	Materials	3
E.E. 123	Electric Circuits	4	E.E. 124	Electric Machinery	4
		18			18

*Senior Year*

C.E. 123	Water Supply	4	C.E. 124	Water Purification	3
C.E. 135	Soils	3	C.E. 116	Highways	3
C.E. 133	Reinforced Concrete	4	C.E. 140	Indeterminate Structures	3
M.E. 103	Heat Power	3	C.E. 144	Projects	2
M.E. 115	Mech. Eng. Laboratory	1	M.E. 104	Heat Power	3
	Elective (Non-Technical)	3	M.E. 116	Mech. Eng. Laboratory	1
		18		Elective (Non-Technical)	3
					18

## GROUP TWO

## ELECTRICAL ENGINEERING

*Sophomore Year*

FIRST SEMESTER			SECOND SEMESTER		
		S.H.			S.H.
Math 52	Calculus II	3	Math 53	Calculus III	3
Phys 51	Physics	5	Phys 52	Physics	5
Econ 51	Economics	3	Econ 52	Economics	3
G.E. 57	Statics	3	M.E. 52	Kinetics—Mechanism	4
E.E. 51	Survey—Electrical		E.E. 52	Fields	3
	Engineering	1		Physical Education	1
Engl 93	Advanced Composition	3			19
	Physical Education	1			
		19			

*Junior Year*

E.E. 101	Circuits	3	E.E. 102	Circuits	3
E.E. 107	Circuits Laboratory	1	E.E. 108	Circuits Laboratory	1
E.E. 105	Measurements	4	E.E. 106	Electronics	4
Math 131	Differential Equations	3	E.E. 148	D-C Machinery	3
M.E. 103	Heat Power	3	M.E. 104	Heat Power	3
M.E. 115	Mech. Eng. Laboratory	1	M.E. 116	Mech. Eng. Laboratory	1
G.E. 128	Hydraulics	3	Engl 151	Public Speaking	3
		18			18

*Senior Year*

E.E. 257	A-C Machinery	3	E.E. 258	A-C Machinery	3
E.E. 163	Machinery Laboratory	1	E.E. 164	Machinery Laboratory	1
E.E. 261	Communications	4	E.E. 262	Communications	4
E.E. 165	Seminar	1	E.E. 166	Seminar	1
E.E. 159	Transmission	3	G.E. 107	Strength of Materials	3
E.E.	Elective	3	G.E. 109	Materials Laboratory	1
	Elective (Non-Technical)	3	E.E.	Elective	2
		18		Elective (Non-Technical)	3
					18

GROUP THREE

MECHANICAL ENGINEERING

*Sophomore Year*

FIRST SEMESTER			SECOND SEMESTER		
		S.H.			S.H.
Math 52	Calculus II	3	Math 53	Calculus III	3
Phys 51	Physics	5	Phys 52	Physics	5
Econ 51	Economics	3	Econ 52	Economics	3
G.E. 57	Statics	3	M.E. 52	Kinetics-Mechanism	4
M.E. 55	Steam Engineering	2	Engl 93	Advanced Composition	3
M.E. 51	Constructive Processes	3		Physical Education	1
	Physical Education	1			19
		20			

*Junior Year*

M.E. 101	Thermodynamics	3	M.E. 102	Thermodynamics	3
M.E. 113	Mech. Eng. Laboratory	1	M.E. 114	Mech. Eng. Laboratory	2
M.E. 105	Fluid Mechanics	3	M.E. 108	Aeronautics	3
G.E. 107	Strength of Materials	3	M.E. 106	Heat Transfer	3
G.E. 109	Materials Laboratory	1	M.E. 150	Machine Design	3
E.E. 123	Electric Circuits	4	E.E. 124	Electric Machinery	4
Engl 151	Public Speaking	3			18
		18			

*Senior Year*

M.E. 151	Machine Design	4	M.E. 158	Industrial Engineering	3
M.E. 155	Internal Combustion Engines	3	M.E. 162	Power Plants	3
M.E. 153	Heating-Air Conditioning	3	M.E. 154	Refrigeration	3
M.E. 159	Mech. Eng. Laboratory	2	M.E. 160	Mech. Eng. Laboratory	2
M.E.	Engineering Elective	3	M.E.	Engineering Elective	3
	Elective (Non-Technical)	3		Elective (Non-Technical)	3
		18			17



## *Bachelor of Science in Nursing Education*

The requirements for the degree of Bachelor of Science in Nursing Education are designed to prepare qualified graduate nurses for administrative, teaching, and supervisory positions in schools of nursing and in nursing service agencies.

To be eligible for admission to Duke University as a candidate for this degree a student must meet the following requirements:

1. Graduation from an approved secondary school with at least fifteen acceptable units of credit. (See specific requirements for admission to Trinity College and the Woman's College.)
2. Graduation from an approved school of nursing which provides satisfactory preparation in medical, surgical, pediatric, and obstetric nursing, as a minimum.
3. Satisfactory scores on specified tests.
4. Supervisory ratings from three individuals, preferably former teachers and supervisors with whom the individual has had fairly recent contact.

Credit for 120 semester hours (exclusive of physical education) on which an average grade of at least C is made is required for the degree of Bachelor of Science in Nursing Education. The work of the final year must be taken in residence at Duke University. The program of studies leading to this degree must include:

	S.H.
1. MINIMUM GENERAL EDUCATION REQUIREMENTS .....	38-50
May be taken at Duke University or at any accredited college or university.	
English 1-2 .....	6
Natural science .....	8
History, economics, or political science .....	6
Sociology .....	3-6
Psychology .....	3-6
Electives .....	12-18
Literature, art, music, religion, ethics, language are suggested.	
2. BASIC NURSING PROGRAM .....	maximum 40
May be taken at the Duke School of Nursing or at any approved school of nursing. The amount of credit which is granted for the nursing school program is determined on an individual basis.	
3. COURSES IN EDUCATION AND NURSING EDUCATION .....	20
88 Psychological Foundations of Modern Education .....	3
84N Social Foundations of Nursing Education .....	3
101N The Curriculum of the School of Nursing .....	3
115N-116N Nursing Education: Principles and Practices .....	8
117 Community Nursing Service—Seminar in Field Trips of Community Agencies .....	3
4. FIELD OF CONCENTRATION .....	15
Fifteen semester hours in one field, such as chemistry, physics, psychology, sociology, zoology, or in a clinical area and related subjects. No freshman work may be included in these 15 semester hours.	
5. PROFESSIONAL EXPERIENCE	
One year of experience as a graduate nurse is required before the degree is awarded.	

## *Academic-Professional Courses*

The provision whereby a senior may elect the work of the first year in a professional school of the University shall apply solely to eligible students in Trinity College or the Woman's College. The privilege of completing a combined course for the degree is conditioned upon admission to the professional school at the close of the junior year. A student thus admitted registers as a senior in the College and as a first-year student in the professional school.

### ACADEMIC-FORESTRY COMBINATION

A student who has completed with an average grade of C or higher the program of study given below may, with the approval of the dean of the College, transfer to the School of Forestry and be eligible for the degree of Bachelor of Science from Duke University upon the satisfactory completion of one year's work. It is understood that this provision shall apply solely to eligible undergraduates who have completed three years in residence in Duke University. The professional degree of Master of Forestry may be obtained on the satisfactory completion of an additional year in the School of Forestry.

The program of studies in preparation for admission to the School of Forestry is divided into four parts: (1) a group of studies required of all students; (2) courses required in a selected division of concentration; (3) additional elective courses sufficient to make a total of at least 92 semester hours of credit; and (4) summer field work in surveying and forest mensuration as described below.

The studies required of all students, of which the first four, together with 6 semester hours of a language, should ordinarily be taken in the freshman year, are as follows:

	S.H.
Botany 1-2 .....	8
Chemistry 1-2 .....	8
English 1-2 .....	6
Engineering Drawing 1-2 .....	4
Modern Foreign Language* .....	12-18
Mathematics 5, 6 .....	6
Physics 1-2 .....	8
Economics 51-52 .....	6
Geology 51 .....	4

At the end of the freshman year each student shall select a division of concentration. One of the following programs of concentration is recommended:

Botany. Botany 51, 151, 156, one additional course in Botany and Zoology 1.

Chemistry. Chemistry 61, 70, and 151-152; and Botany 151.

Economics. Economics 60, two additional semester courses in economics, and Political Science 61-62.

\* The requirement is the same as for the Degree of Bachelor of Science, except that Spanish may be substituted for French.

A student who does not select one of the above programs must complete the work of the junior year in his major and related fields.

Summer field work is required of all students in the School of Forestry. This program of 13 weeks, preferably to be taken upon completion of the junior year, includes Civil Engineering S110 (Plane Surveying), 4 s.h.; Forestry S150 (Forest Surveying), 5 s.h.; and Forestry S151 (Forest Mensuration), 4 s.h.

Completion of the first three years of work toward the Bachelor of Science degree does not insure admission to the Duke University School of Forestry, nor impose any restriction whatever upon its freedom in selecting students for admission.

Students wishing information concerning admission to the School of Forestry are invited to consult with the dean of that School.

### ACADEMIC-LAW COMBINATION

A student who has completed with an average grade of C or higher, 96 semester hours of undergraduate work, including the uniform course requirements for the degree of Bachelor of Arts and the work of the junior year in his major and related fields, may, with the approval of the dean of the College, transfer to the Duke University School of Law and be eligible for the degree of Bachelor of Arts from Duke University upon the satisfactory completion therein of the work of the first year.

It is understood that this provision shall apply solely to eligible undergraduates who have completed three years in residence in Duke University, and that not less than the full first-year's work of the Law School will be acceptable for credit towards the bachelor degree.

No single discipline or program of study can be described as the best preparation for the study of law. There are various methods of approach to legal study. Students differ with respect to the undergraduate studies by which they profit most in preparing themselves for law school.

Completion of the undergraduate work necessary to qualify for the Academic-Law Combination does not insure admission to the Duke University School of Law, nor impose any restriction whatever upon its freedom in selecting students for admission.

The first-year program of the Law School will include in 1951-52 the following courses:

	Fall Semester S.H.	Spring Semester S.H.
Chattel Transactions .....	2	2
Contracts .....	3	3
Estates in Land .....	—	3
Research and Writing .....	1	1
Torts (including some Procedure) .....	2	3

Legislation .....	3	—
Business Associations 1 (Agency, Partnership, Introduction to Corporations) .....	—	2
Criminal Law .....	3	—
	<hr/> 14	<hr/> 14

Students wishing further information are invited to consult with the Dean of the School of Law.

### ACADEMIC-NURSING COMBINATION

A student who graduated from the Duke University School of Nursing in September, 1947, or thereafter, with an average grade of C or better, may, upon recommendation of the Dean of the School of Nursing, apply for admission to the Woman's College of Duke University. If accepted, she may obtain the degree of Bachelor of Arts or Bachelor of Science by fulfilling the requirements of either degree.

Forty semester hours of credit toward the 120 semester hours (exclusive of physical education) required for the Bachelor's degree are allowed for the three-year nursing program. At least 30 semester hours, of which 24 semester hours must be in courses numbered 100 or above, must be taken in residence in the Woman's College. An average grade of C or better is required for all work.

The program of studies leading to the degree of Bachelor of Arts must include:

	S.H.
1. UNIFORM COURSE REQUIREMENTS .....	47-59
English 1-2 .....	6
Language (completion of the third college year) .....	6-18
Natural Science .....	11
Religion .....	6
Social Science and History .....	12
Literature, Music, Art, and Philosophy .....	6
2. BASIC NURSING PROGRAM .....	40
3. FIELD OF CONCENTRATION .....	12
At least 12 semester hours in one department other than nursing in courses not primarily open to freshmen .....	12
4. ELECTIVES .....	9-21

To be eligible for the degree of Bachelor of Science, a student must complete the course of study outlined under the Requirements for the Degree of Bachelor of Science.

# Courses of Instruction

## Trinity College and the Woman's College



NOTE: Courses primarily for freshmen are numbered from 1 to 49; those primarily for sophomores are numbered from 50 to 99; those primarily for juniors and seniors from 100 to 199; those primarily for seniors and graduates from 200 to 299. The amount of credit for each course is given in semester hours following the description of the course.

The designation (w) or (E) indicates that the course is to be given on the West Campus or on the East Campus. The designation E means Engineering; L, Law; ds, Divinity School. When this designation precedes a course number, the course is not approved for graduate credit.

Odd-numbered courses are offered in the fall semester, and even-numbered courses are offered in the spring semester. Double numbers indicate that the course is a year-course and must normally be continued throughout the year if credit is received. A student must secure written permission from the instructor in order to receive credit for either semester of a year-course.

### COURSES OPEN PRIMARILY TO FRESHMEN

Air Science 1-2  
 Art 1-2  
 Botany 1-2  
 Chemistry 1-2  
 Economics 11, 12  
 Education 1  
 English 1-2  
 French 1-2, 3-4  
 German 1-2, 3-4  
 Greek 15  
 Health Education 41  
 History 1-2

Latin 1-2, 3, 4  
 Mathematics 1, 5, 6, 15, 16  
 Music 1-2, 11-12, 47-48  
 Naval Science 101, 102  
 Philosophy 48, 49  
 Physical Education 1, 2  
 Physics 1-2  
 Political Science 21, 22  
 Religion 1-2  
 Spanish 1-2, 3-4  
 Zoology 1-2

### AESTHETICS, ART, AND MUSIC

PROFESSOR KATHARINE E. GILBERT, CHAIRMAN; ASSISTANT PROFESSOR SUNDERLAND, DIRECTOR OF UNDERGRADUATE STUDIES IN ART; ASSOCIATE PROFESSOR HALL, SUPERVISOR OF FRESHMAN INSTRUCTION IN ART; ASSISTANT PROFESSOR JULIA W. MUELLER, DIRECTOR OF UNDERGRADUATE STUDIES IN MUSIC; ASSISTANT PROFESSOR BONE, SUPERVISOR OF FRESHMAN INSTRUCTION IN MUSIC; ASSISTANT PROFESSORS JENKINS, KLENZ, MARKMAN, EARL MUELLER, SAVILLE, AND WITHERS; MR. GRAY

#### AESTHETICS

FOR SENIORS AND GRADUATES

201-202. THE PHILOSOPHY OF ART.—Analysis with the aid of examples of general terms used in the discussion of art. Reference to recent aesthetic theories. 6 s.h. (E) PROFESSOR GILBERT

213-214. HISTORY OF AESTHETICS.—Theories of art and beauty from Pythagoras to Croce. 6 s.h. (E) PROFESSOR GILBERT



## ART

1-2. HISTORY OF ART.—An introductory course for freshmen, designed to help the new student in relating the different manifestations of art in each period to the civilization that produced them. Open to freshmen only. 6 s.h. (E)

ASSOCIATE PROFESSOR HALL

51-52. HISTORY OF ART: ART AND CULTURE IN THE WESTERN WORLD.—An historical survey of the development of architecture, sculpture, painting and minor arts as material manifestations of the culture of the western world from ancient Egypt to modern times. Open to upperclassmen who have not had Art 1-2 or 61-62, and to freshmen in Trinity College and the College of Engineering who present evidence of special interest. 6 s.h. (E)

ASSISTANT PROFESSOR MARKMAN

53-54. THEORY OF REPRESENTATION AND DESIGN.—A study of the basic elements in art and the principles of their organization, with reference to pure and representational forms in historical and contemporary usage. No previous experience in drawing and painting is required. One lecture and four laboratory hours. Open to students who are enrolled in, or have completed, a year-course in the Department. 6 s.h. (E)

ASSISTANT PROFESSOR E. MUELLER

55-56. ART LABORATORY.—A course in drawing and painting or in design, as elected by the student. Individual and class criticism of student work, with investigation and discussion of contemporary developments in painting and design. Four laboratory hours. Open to students who are enrolled in, or have completed, a year-course in the Department. Prerequisite: Art 53-54, or consent of the instructor. 4 s.h. (E)

ASSISTANT PROFESSOR E. MUELLER

61-62. ARCHITECTURAL HISTORY AND DESIGN.—An introductory course in the historic development of architectural principles, and their application to elementary problems of design. No previous experience in freehand or technical drawing is required. Two lectures and three laboratory hours. Open to upperclassmen who have not had Art 1-2 or 51-52; and occasionally to freshmen who present to the instructor evidence of special preparation. 6 s.h. (E)

ASSOCIATE PROFESSOR HALL

94. AMERICAN ART.—A study of the formation of a cultural tradition in the United States as seen through examples of architecture, sculpture, and painting, with some reference to the minor arts. Not open to majors for credit. 3 s.h. (E)

ASSISTANT PROFESSOR E. MUELLER

101. MEDIAEVAL ARCHITECTURE.—A survey of Christian architecture in the Near East and Eastern and Western Europe from the beginnings of the mediæval style in the late classical period to its disintegration in the fifteenth century. 3 s.h. (E)

ASSISTANT PROFESSOR SUNDERLAND

102. MEDIAEVAL PAINTING AND SCULPTURE.—A study of painting and sculpture in Western Europe from the late classical period through the fourteenth century. 3 s.h. (E)

ASSISTANT PROFESSOR SUNDERLAND

103. RENAISSANCE AND BAROQUE ARCHITECTURE: ITALY.—Architectural patronage of the great families and the Church, as evidenced by the works of individual designers from Brunelleschi through Michelangelo and Palladio to Borromini. 3 s.h. (E)

ASSOCIATE PROFESSOR HALL

104. RENAISSANCE AND BAROQUE ARCHITECTURE: SPAIN AND THE NORTH.—An inquiry into the extension of Italian Renaissance and Baroque influence in architecture, and its modification under local conditions elsewhere in Europe. 3 s.h. (E)

ASSOCIATE PROFESSOR HALL

105. EUROPEAN ARCHITECTURE SINCE 1700.—An analysis of the sources of contemporary European architecture in the historic revival styles and counter-revolts, technical invention and new structural materials, industrial expansion and social planning. 3 s.h. (E)

ASSOCIATE PROFESSOR HALL

106. ARCHITECTURE OF THE AMERICAS.—A study of building in the Western Hemisphere from the Precolumbian cultures to the present with emphasis on the architecture of the United States since the Revolution. 3 s.h. (E)

ASSOCIATE PROFESSOR HALL

110. ENGLISH ARCHITECTURE.—The English home, church, and community, studied as the architectural reflection of continental influences, independent developments in the British Isles, and colonial expansion. This course is intentionally directed toward the interests of students majoring in history or literature. 3 s.h. (E)

ASSOCIATE PROFESSOR HALL

123. RENAISSANCE PAINTING: ITALY.—A study of Italian painting, mainly in Florence, from the end of the fourteenth through the fifteenth century. 3 s.h. (E)

ASSISTANT PROFESSOR SUNDERLAND

124. BAROQUE PAINTING: ITALY.—An analysis of the character and tendencies of seventeenth-century painting in Italy. 3 s.h. (E)

ASSISTANT PROFESSOR JENKINS

125. RENAISSANCE PAINTING: THE NORTH.—A study of painting in the Netherlands in the fifteenth and sixteenth centuries. 3 s.h. (E)

ASSISTANT PROFESSOR SUNDERLAND

126. BAROQUE PAINTING: THE NORTH.—A study of the character and tendencies of seventeenth-century painting in Spain, France, and the Lowlands in the seventeenth century. 3 s.h. (E)

ASSISTANT PROFESSOR SUNDERLAND

130. PAINTING SINCE 1700.—An investigation of the development of painting from the eighteenth century through Picasso. 3 s.h. (E)

ASSISTANT PROFESSOR SUNDERLAND

131. CONTEMPORARY ART.—Study of the twentieth century movements in painting, sculpture, and the graphic arts in Europe and the Americas. 3 s.h. (E)

ASSISTANT PROFESSOR E. MUELLER

150. SURVEY OF PAINTING.—A history of painting from prehistoric times to the present day intended primarily for students who are not majors in the department. Open to upperclassmen who have not had Art 1-2 or 51-52. Offered each semester. 3 s.h. (E)

ASSISTANT PROFESSOR JENKINS

157-158. ADVANCED LABORATORY IN ART.—Emphasis is given to the techniques of various painting and design media. Four laboratory hours. Prerequisite: Art 55-56. 4 s.h. (E)

ASSISTANT PROFESSOR E. MUELLER

215. RELIGIOUS ART OF THE ANCIENT NEAR EAST.—A specialized study of the development of art, particularly architecture and sculpture, as the material expression of religious ideas in Egypt, Mesopotamia, and in part of Syria and Palestine, to the Persian conquest. 3 s.h. (w)

ASSISTANT PROFESSOR MARKMAN

216. RELIGIOUS ART OF THE CLASSICAL WORLD.—A specialized study of the religious art, particularly architecture and sculpture, of Greece and Rome, with special emphasis on the monuments in the Near East. 3 s.h. (w)

ASSISTANT PROFESSOR MARKMAN

217. AEGEAN ART.—A study of the problems of Aegean art as the forerunner of Greek art and in relation to the contemporary civilizations of the eastern Mediterranean world. 3 s.h. (w)

ASSISTANT PROFESSOR MARKMAN

218. EARLY GREEK ART.—A study of the problems of the origin and development of Greek art in the Geometric period to the end of the Archaic. 3 s.h. (w)

ASSISTANT PROFESSOR MARKMAN

#### DEPARTMENTAL MAJOR IN ART

*Prerequisite:* Art 1-2 or 51-52 or 61-62.

*Major Requirements:* Art 53-54, and 18 additional semester hours in the Department.

## MUSIC

Courses in music are offered both for the general student who wishes to acquire knowledge of music as literature and on a more technical level for those prepared to major in the field. The courses marked \* are open to general students without prerequisites.

## THEORY

\*11-12. FUNDAMENTALS OF MUSIC (THEORY I).—The elements of harmony, rhythm, and form; the visual and aural recognition of scales, intervals, triads, and seventh chords, and their functions in relation to the system of tonality; harmonization of melodies; development of rhythmic discrimination. Designed for those students who wish to pursue a more technical study of music. Three lectures and two laboratory hours. Open to freshmen only. 8 s.h. (E) STAFF

\*61-62. FUNDAMENTALS OF MUSIC (THEORY I).—An amplification of Music 11-12. Open to upperclassmen who have not had Music 11-12. 8 s.h. (E) STAFF

73-74. HARMONY AND SMALLER FORMS (THEORY II).—A continuation of Music 11-12, plus analysis and composition of the smaller forms; further development of proficiency in harmonization; continuation of aural training; introductory study of counterpoint. Prerequisite: Music 11-12 or 61-62. 6 s.h. (E)

ASSISTANT PROFESSOR KLENZ

117-118. ADVANCED HARMONY AND COUNTERPOINT (THEORY III).—A continuation of Music 73-74. Emphasis upon development of technical and expressive means and stylistic treatment by practical work in composition, and analysis and observation of larger forms; further study of counterpoint. The completion of an original large form composition for chamber group, chorus, or orchestra. Prerequisites: Music 11-12 or 61-62, and 73-74. 4 s.h. (E)

ASSISTANT PROFESSOR KLENZ

121. CONDUCTING.—The conducting of orchestral and vocal scores. Score-reading and analysis, principles of interpretation, establishment of vocal and instrumental conductorial techniques leading to practical experience in conducting the department musical organizations in rehearsal. Prerequisites: Music 11-12 or 61-62, and 73, or consent of the instructor. 3 s.h. (E) ASSISTANT PROFESSOR BONE

122. ORCHESTRATION.—A study of the technical characteristics and transpositions of the instruments of the modern symphony orchestra and concert band. Instrumentation of piano scores or original compositions for string, woodwind, brass ensembles, and for full symphony orchestra or concert band. Prerequisites: Music 11-12 or 61-62, and 73, or consent of the instructor. 3 s.h. (E)

ASSISTANT PROFESSOR BONE

## HISTORY AND CRITICISM

\*1-2. INTRODUCTION TO MUSIC.—Rhythm, melody, harmony, form. The instruments of the orchestra and their use. Orchestral, chamber, choral and operatic music of the Classic and Romantic periods. Designed for those students who wish to acquire a general appreciation of Music. Open only to freshmen who do not plan to major in music. 6 s.h. (E) ASSISTANT PROFESSOR WITHERS

\*51-52. INTRODUCTION TO MUSIC.—Music from 1700 to the present day. Acquisition of a reading knowledge of notes, rhythms, musical symbols. Study of forms, media, styles, and the lives and works of great representative composers. Not open to music majors or to students who have had Music 1-2. 6 s.h. (E)

ASSISTANT PROFESSOR J. MUELLER

65. PIANO ENSEMBLE.—The study and performance of classical and contemporary two-piano repertoire and the piano concerto. The reading of standard symphonies and overtures arranged for four hands. Emphasis on ensemble principles: rhythm, phrasing, balance. Prerequisites: Music 11-12 or 61-62, or consent of the instructor. 1 s.h. (E)

ASSISTANT PROFESSOR WITHERS

66. MIXED ENSEMBLE.—Supervised coaching in the technical and interpretative elements of ensemble performance. Ensembles for varying numbers and types of instruments to be arranged. Open only to students concurrently enrolled in Applied Music. 1 s.h. (E) STAFF

95-96. HISTORY OF MUSIC.—Historical background and development of music in the Classical, Romantic, and Contemporary periods. Analysis of representative compositions from the Mannheim school through Beethoven, first semester; Schubert to the present, second semester. Prerequisites: Music 1-2, or 11-12, or consent of instructor. 6 s.h. (E) ASSISTANT PROFESSOR BONE

\*133. ORCHESTRAL LITERATURE.—A study of orchestral suites, overtures, concerti, symphonies and symphonic poems selected from literature of the eighteenth century to the present. 3 s.h. (E) ASSISTANT PROFESSOR BONE

\*134. CHORAL LITERATURE.—A study of representative oratorios, cantatas, and masses from Bach to Stravinsky; religious and social implications of sacred choral composition and performance from the Baroque to the present. 3 s.h. (E) ASSISTANT PROFESSOR SAVILLE

135. PIANO LITERATURE.—A comprehensive survey of the great works for keyboard instruments, from the time of the English virginal composers to the present. Prerequisites: Music 1-2 or 51-52, or consent of the instructor. 3 s.h. (E) ASSISTANT PROFESSOR WITHERS

137. CHAMBER MUSIC.—A study of form, style, and interpretation of masterpieces of chamber music. Prerequisites: Music 1-2 or 51-52, or 11-12 or 61-62, or consent of the instructor. 3 s.h. (E) ASSISTANT PROFESSOR J. MUELLER

138. CONTEMPORARY MUSIC.—A critical survey of contemporary stylistic trends and theory in the light of their twentieth-century background. Prerequisites: Music 1-2 or 51-52, or 11-12, or 61-62, or consent of the instructor. 3 s.h. (E) ASSISTANT PROFESSOR KLENZ

145-146. HISTORY OF MUSIC.—Historical background and development of music in the Mediaeval, Renaissance, and Baroque periods. Analysis of representative compositions from Gregorian Chant through sixteenth century, first semester; Monteverdi through Bach and Handel, second semester. Prerequisites: Music 1-2, or 51-52, or 11-12, or consent of instructor. 6 s.h. (E) ASSISTANT PROFESSOR SAVILLE

\*164. MUSIC IN THE NINETEENTH CENTURY.—A study of the music of the nineteenth century, from Beethoven to Debussy, with attention to artistic and literary influences, and the relations among the creative minds of the time. Individual projects. 3 s.h. (E) ASSISTANT PROFESSOR J. MUELLER

\*165. OPERA.—Opera from Handel to Strauss, together with its social and cultural implications. 3 s.h. (E) ASSISTANT PROFESSOR SAVILLE

195-196. COLLEGIUM MUSICUM.—Studies in the integration of music history, theory, and performance. Survey of sources, monuments, and bibliographical techniques. Preparation for performance of representative musical literature through analysis, realization of notations, and stylistic reconstruction. Classroom discussion and reports; also laboratory. Designed for music majors in history and theory and open to others by consent of instructor. 4 s.h. Laboratory may be taken separately for credit of 2 s.h. (E) ASSISTANT PROFESSOR KLENZ

#### MUSIC EDUCATION

101-102. VOCAL METHODS.—Materials and methods of teaching vocal music and appreciation in public schools; emphasis on music-reading, the changing voice, part-singing, integration of music within the general school curriculum. Elementary, intermediate grades studied first semester; junior, senior high levels, second semester. Prerequisites: Music 11-12 or 61-62, or consent of instructor. Designed primarily for Music Education majors. 6 s.h. (E) ASSISTANT PROFESSOR SAVILLE



103-104. INSTRUMENTAL METHODS.—A study of materials and methods of teaching instrumental music in the public schools; emphasis on instrumental pedagogy, organization, and administration of the junior and senior high school instrumental curriculum. Designed primarily for Music Education majors. Prerequisites: Music 11-12 or 61-62, or consent of the instructor. 6 s.h. (E)

ASSISTANT PROFESSOR BONE

106. PIANO METHODS AND MATERIALS.—A study of the materials and methods of piano pedagogy. The appropriate choice of essential and supplementary literature. Development of technique, style, and musicianship. Supervised practice teaching. Prerequisites: Music 11-12 or 61-62, or consent of the instructor. 3 s.h. (E)

ASSISTANT PROFESSOR WITHERS

151-152. MUSIC FOR EDUCATION MAJORS.—Primarily designed for elementary education majors who desire to qualify for the North Carolina State Teaching Certificate. Materials and methods of music teaching in the first six grades; treatment of the child voice, appreciation, music-reading; integration of music within the general school curriculum. 6 s.h. (E)

ASSISTANT PROFESSOR SAVILLE

#### APPLIED MUSIC

Members of the Department offer instruction in the following media: A. Piano; B. Strings; C. Woodwinds; D. Brass.

A student who plans to take Applied Music should consult the appropriate faculty member as early as possible before registering for the course offered in his chosen medium at his class level. His proficiency before registration is tested by audition and rated as Grade I-VIII. Upon satisfactory completion of the course his proficiency is again rated, and his Grade recorded as a Roman numeral following the course number; e.g., a freshman who passes the first semester course in Piano with a proficiency rating of Grade VI is recorded as having completed Music 47A-VI, a senior who passes the first semester course in Violin with a proficiency rating of Grade II is recorded as having completed Music 197B-II, and so on. This is in addition to the customary letter-grades recorded for students in all courses.

47A-48A, 97A-98A, 147A-148A, 197A-198A. PIANO.—For freshmen, sophomores, juniors, seniors. 2 s.h. (E)

ASSISTANT PROFESSORS SAVILLE AND WITHERS

47B-48B, 97B-98B, 147B-148B, 197B-198B. VIOLIN, VIOLA, CELLO.—For freshmen, sophomores, juniors, seniors. 2 s.h. (E)

ASSISTANT PROFESSORS KLENZ AND J. MUELLER

47C-48C, 97C-98C, 147C-148C, 197C-198C. WOODWINDS.—For freshmen, sophomores, juniors, seniors. 2 s.h. (E)

ASSISTANT PROFESSOR BONE, MR. GRAY

47D-48D, 97D-98D, 147D-148D, 197D-198D. BRASS.—For freshmen, sophomores, juniors, seniors. 2 s.h. (E)

ASSISTANT PROFESSOR BONE, MR. GRAY

*Requirements and Credits:* One semester hour of credit is allowed for  $\frac{1}{2}$  hour of private instruction per week and a minimum of one hour of practice daily, under the particular conditions specified below, and in accordance with standard university practice in grading proficiency. For any number of semester hours of credit in Applied Music, an equal number of hours must be taken in Music Theory or Music History.

Majors in Music Theory must earn 6 semester hours credit in Applied Music. Credit may be reckoned from Grade I.

Majors in Music History and Criticism must earn 6 semester hours credit in Applied Music. Credit may be reckoned from Grade I.

Majors in Music Education must earn 7 semester hours credit in Applied Music, as follows:

General (Choral) majors:

Major medium, reckoned from Grade III.—5 s.h.

Minor medium, reckoned from Grade I.—2 s.h.

Instrumental majors:

Major medium, reckoned from Grade III.—5 s.h.

Minor medium, reckoned from Grade I.—2 s.h.

Piano proficiency through Grade II.



Students other than Music Majors may receive not more than 8 semester hours credit for work in Applied Music. Credit may be reckoned from Grade I.

*Fees per Semester:* Fees for instruction in Applied Music include rental of practice facilities sufficient to meet the credit requirements. They are payable to the Treasurer's Office of Duke University at the beginning of each semester, as follows:

One ½ hour lesson per week for 15 weeks.....	\$40.00
Either	
One hour's daily use of cubicle with piano.....	15.00
Or	
One hour's use daily of cubicle without piano.....	10.00

#### DEPARTMENTAL MAJOR IN MUSIC

*Prerequisite:* Music 11-12 or 61-62.

*Major Requirements:* Music 81-82, and 22 additional semester hours in the Department. The major student will select, in consultation with his departmental adviser, a sequence of Music courses emphasizing (a) theory, or (b) history and criticism, or (c) education, or (d) the use and understanding of a particular medium.

#### DEPARTMENTAL ORGANIZATIONS

Students taking Applied Music are urged by the Department to participate in one or more of the following departmental organizations:

Duke University Symphony Orchestra  
Duke University Chamber Orchestra  
Duke University Concert Band  
Duke University Madrigal Singers

#### AIR SCIENCE

PROFESSOR SWITZER, COLONEL, USAF; ASSOCIATE PROFESSOR RAMBEAU, LIEUTENANT COLONEL, USAF; ASSISTANT PROFESSORS MCBRYDE, MAJOR, USAF; RENKEN, CAPTAIN, USAF; AND CLARK, CAPTAIN, USAF

**ELIGIBILITY REQUIREMENTS.**—All physically qualified freshmen who are citizens of the United States and are enrolled in Trinity College or the College of Engineering are eligible to enroll in the Air Force ROTC. Veterans may be exempted from the freshman and sophomore courses (AS 1-2 or 11-12, AS 51-52 or 61-62).

**AIR FORCE ROTC COURSES.**—Trinity College students pursuing the program will specialize in general administration and supply. Students in the College of Engineering will specialize in Air Installations. The courses are established by the United States Air Force and are approved by the College as electives for all undergraduates. Field or laboratory instruction in leadership, drill and exercise of command is included as a part of all courses to indoctrinate the student in the fundamental principles of command.

#### ADMINISTRATION AND LOGISTICS

**AS 1-2. DEVELOPMENT OF ARMED FORCES AND THE CONCEPTS OF AIR POWER.**—This is an introductory course which traces the history and development of current military concepts. It analyzes the relationship of strategy and tactics to the military and political potentials of the nations. The student deals with the analysis of military power on the basis of population, non-human environment, technology, organization and political behavior. Geography is presented from the global viewpoint and map reading and aerial photography are studied. 4. s.h.  
(w) STAFF

**AS 51-52. APPLIED AIR POWER AND ELEMENTARY AIR FORCE ADMINISTRATION.**—This course covers during the first semester the development and use of military aircraft, air navigation, and weather; and in the second semester teaches the use of records for an Air Force organization and the administration of an Air Force base. Prerequisite: AS 1-2 or equivalent. 4 s.h. (w) STAFF

AS 101-102. AIR FORCE ADMINISTRATION AND LOGISTICS.—The course in general administration and supply includes instruction in the basic functions of administrative and supply officers; records, expenditure of funds, transportation and special administrative responsibilities. Prerequisites: AS 1-2 and 51-52 or equivalent. 8 s.h. (w) ASSISTANT PROFESSOR MCBRYDE

AS 201-202. ADVANCED AIR FORCE ADMINISTRATION.—A study of military procedure in administration, management, law, teaching, and career development combined with an analysis of staff responsibilities and interrelationship. Prerequisites: AS 1-2 and 51-52 or equivalent, and AS 101-102. 8 s.h. (w) ASSISTANT PROFESSOR MCBRYDE

#### AIR INSTALLATIONS

AS 11-12. DEVELOPMENT OF THE ARMED FORCES, CONCEPTS OF AIR POWER, AND MAINTENANCE OF INSTALLATIONS.—An introductory course which traces the history and development of current military concepts and deals with the analysis of military power on the basis of population, environment, and political behavior. The responsibilities of the Air Installations officer for providing fire protection, grounds maintenance, refuse disposal, and pest control at air bases are studied. 6 s.h. STAFF

AS 61-62. APPLIED AIR POWER AND ELEMENTS OF AIR INSTALLATIONS.—During the first semester the principles of military logistics and administration, military teaching methods, and air force management are taught. The second semester is devoted to air operations and the functions and organization of the air installations office. Prerequisites: AS 11-12 or equivalent. 6 s.h. (w) STAFF

AS 111-112. AIR INSTALLATIONS AND MAINTENANCE ENGINEERING.—This is the first year of the advanced course in air science for engineering students and is applied to specialized instruction in the field of installation and maintenance engineering. The first semester covers the construction of bases and landing fields, roads, railroads and sewage disposal plants; the disposal of refuse, and the control of insects and rodents. The second semester is allotted to fire prevention and crash rescue, electrical facilities, water supply, and preventive maintenance. Prerequisites: AS 11-12 and 61-62 or equivalent. 8 s.h. (w) ASSISTANT PROFESSOR RENKEN

AS 211-212. ADVANCED AIR INSTALLATIONS.—Completes the specialized instruction in the field of installation and maintenance engineering with brief courses in real estate administration, project analysis, and planning. In addition the functions of the inspector general, military law and boards and the air force officer career development program are taught. Prerequisites: AS 11-12 and 61-62 or equivalent, and AS 111-112. 2 s.h. (w) ASSISTANT PROFESSOR RENKEN

#### BOTANY

PROFESSOR BLOMQUIST, CHAIRMAN; PROFESSOR OOSTING, DIRECTOR OF UNDERGRADUATE STUDIES; ASSOCIATE PROFESSOR ANDERSON, SUPERVISOR OF FRESHMAN INSTRUCTION;

PROFESSOR ADDOMS, SUPERVISOR OF FRESHMAN INSTRUCTION (WOMAN'S COLLEGE);

PROFESSORS HARRAR, KRAMIR AND WOLF; ASSOCIATE PROFESSOR PERRY;

DRS. KEEFER AND WARREN; MR. BATSON; AND ASSISTANTS

1. GENERAL BOTANY.—An introduction to the structure and life-processes of seed plants and the environmental factors influencing their distribution. Laboratory, discussions, and field trips. Three two-hour periods. 4 s.h. (w & E) STAFF

2. GENERAL BOTANY.—A survey of the plant kingdom with emphasis on reproduction and an introduction to identification. Three two-hour periods. Prerequisite: Botany 1. 4 s.h. (w & E) STAFF

51. CULTURE AND PROPAGATION OF PLANTS.—Experimental studies of the processes involved in growth, and the application of this knowledge to the selection, growth, and propagation of plants. Prerequisite: one year of botany. 4 s.h. (E) PROFESSOR ADDOMS

52. **PLANT IDENTIFICATION.**—Practice in the identification of local plants, especially flowering plants, and a study of the principles and rules underlying plant classification. Laboratory, lectures, and field trips. Prerequisite: one year of botany. 4 s.h. (w) PROFESSOR BLUMQUIST

55. **MORPHOLOGY AND ANATOMY OF VASCULAR PLANTS.**—A comparative study of representative ferns and seed plants, including vegetative and reproductive structures. Prerequisite: one year of botany. 4 s.h. (w)

PROFESSOR OOSTING

101. **PRINCIPLES OF HEREDITY.**—The basic principles of heredity and their significance. Lectures, three hours; laboratory, two hours; conference (attendance optional), one hour. Laboratory work includes experimental breeding of the fruit fly. May be taken as a lecture course without laboratory. Prerequisite: one (high-school or college) course in biology, botany, or zoology. High-school or college algebra recommended. 3 or 4 s.h. (w)

ASSOCIATE PROFESSOR PERRY

103. **GENERAL BACTERIOLOGY.**—A study of the morphology and fundamental physiological processes of bacteria; their relationship to sanitation, public health, soil fertility, and food preservation. Prerequisite: one year of botany or zoology, or equivalent. 4 s.h. (w) *first semester*; (E) *second semester*. DR. WARREN

104. **THE STRUCTURE AND IDENTIFICATION OF LOWER PLANTS.**—A study of representative examples of algae, fungi, mosses and liverworts, including collection, identification, and classification of common forms. Offered in alternate years. Prerequisite: one year of botany. 4 s.h. (w) ASSOCIATE PROFESSOR ANDERSON

151. **INTRODUCTORY PLANT PHYSIOLOGY.**—The principal physiological processes of plants, including water relations, synthesis and use of foods, and growth phenomena. Prerequisite: Botany 1, 2 or equivalent; one year of chemistry recommended. 4 s.h. (w)

PROFESSOR KRAMER

156. **PLANT ECOLOGY.**—The principal factors affecting plants and plant communities as they exist in different environments. Laboratory, lectures, and field trips. Prerequisites: Botany 1, 2 and 52, or equivalent. 4 s.h. (w)

PROFESSOR OOSTING

202. **GENETICS.**—The principles of heredity, their cytological basis, and their bearing on other fields of biology. Laboratory work involves experimental breeding of the fruit fly and interpretation of data from the breeding of plants. Offered in alternate years. Prerequisites: one year of botany or zoology, or equivalent, and college algebra. 4 s.h. (w)

ASSOCIATE PROFESSOR PERRY

203. **PLANT CYTOLOGY.**—A study of the structure and organization of plant cells in relation to growth, reproduction, and especially heredity. Offered in alternate years. Prerequisite: one year of botany. 4 s.h. (w)

ASSOCIATE PROFESSOR ANDERSON

204. **ADVANCED PLANT ANATOMY.**—The structure of vegetative and reproductive organs of seed plants. Physiological and ecological implications of structure are stressed. Offered in alternate years. Prerequisite: Botany 55 or equivalent. 4 s.h. (w)

PROFESSOR ADDOMIS

216. **BOTANICAL MICROTECHNIQUE.**—Studies in methods of preparing temporary and permanent microscopical slides; theory of staining; the use of the microscope, especially microscopical measurements; drawing, and photomicrography, botanical photography, and lantern slides. Prerequisite: two semesters of botany. 4 s.h. (w)

ASSOCIATE PROFESSOR ANDERSON

221. **STRUCTURE AND CLASSIFICATION OF FUNGI.**—Prerequisite: two semesters of botany. 4 s.h. (w)

PROFESSOR WOLF

222. **PHYSIOLOGY AND ECOLOGY OF FUNGI.**—Prerequisite: Botany 221 or equivalent. 4 s.h. (w)

PROFESSOR WOLF

225-226. SPECIAL PROBLEMS.—Students with adequate training may do special work in the following fields:

- a. BACTERIOLOGY, MYCOLOGY, AND PLANT PATHOLOGY.  
DR. WARREN, PROFESSOR WOLF
- b. CYTOLOGY.  
ASSOCIATE PROFESSOR ANDERSON
- c. ECOLOGY.  
PROFESSOR OOSTING
- d. GENETICS.  
ASSOCIATE PROFESSOR PERRY
- e. MORPHOLOGY AND ANATOMY OF HIGHER GROUPS.  
PROFESSORS ADDOMS, HARRAR, AND OOSTING
- f. MORPHOLOGY AND TAXONOMY OF LOWER GROUPS.  
PROFESSOR BLOMQUIST AND ASSOCIATE PROFESSOR ANDERSON
- g. PHYSIOLOGY.  
PROFESSORS KRAMER AND ADDOMS
- h. PLANT MICROCHEMISTRY.  
PROFESSOR ADDOMS
- i. TAXONOMY OF HIGHER GROUPS.  
PROFESSOR BLOMQUIST
- j. SENIOR SEMINAR.—1 s.h. (w)  
STAFF

252. ADVANCED PLANT PHYSIOLOGY.—The physicochemical processes and conditions underlying the physiological processes of plants. -Prerequisite: Botany 151 or equivalent; organic chemistry recommended. 4 s.h. (w) PROFESSOR KRAMER

255. ADVANCED TAXONOMY.—A study of the historical background of plant taxonomy, modern concepts and systems of classification, nomenclatorial problems and the taxonomy of specialized groups. Prerequisite: two years of botany, including Botany 52 or equivalent. 4 s.h. (w) PROFESSOR BLOMQUIST

256. FIELD ECOLOGY.—An ecological survey of local vegetation including theory and practice in the use of instruments for precise habitat studies, and analysis of community and successional relationships. Offered in alternate years. Prerequisites: Botany 1, 2, and 52 or equivalent. 4 s.h. (w) PROFESSOR OOSTING

#### FOREST BOTANY

224. FOREST PATHOLOGY.—Special reference to diseases of forest trees. Prerequisites: Botany 1, 2. 3 or 4 s.h. (w) PROFESSOR WOLF

253. DENDROLOGY.—Nomenclature, classification, and identification of woody plants with special reference to species indigenous to southeastern United States and other important forest regions of temperate North America. Laboratory and field work. Prerequisite: one year of botany. 3 s.h. (w) PROFESSOR HARRAR

Related courses which may be counted toward a major in botany. Zoology 110. Introduction to Genetics. 2 s.h. (w) ASSISTANT PROFESSOR ROBERTS

#### DEPARTMENTAL MAJOR

*Prerequisites:* Botany 1 and 2.

*Major Requirements:* A minimum of 21 hours of work including courses 52, 55, and 104. The remaining hours may be selected from any other courses in the Department for which the student is eligible, subject to the approval of the Departmental Adviser. All majors are expected to register for Senior Seminar for one semester of their senior year.

#### CHEMISTRY

PROFESSOR SAYLOR, EXECUTIVE OFFICER AND DIRECTOR OF UNDERGRADUATE STUDIES; ASSOCIATE PROFESSOR HILL, SUPERVISOR OF FRESHMAN INSTRUCTION; PROFESSORS BIGELOW, GROSS, HAUSER, HOBBS, LONDON AND VOSBURGH; ASSOCIATE PROFESSORS BRADSHAW AND BROWN; DRs. STROBEL AND WILDER; MESSRS. ALLENSON AND POWELL, AND ASSISTANTS

1-2. GENERAL INORGANIC CHEMISTRY.—Lectures, recitations, and laboratory work on the elementary principles of chemistry and on the occurrence, preparation, properties, and uses of the elements and their compounds. One



lecture, two recitations, and three laboratory hours, throughout the year. 8 s.h. (w & f)

ASSOCIATE PROFESSOR HILL; ASSOCIATE PROFESSORS BRADSHAW  
AND BROWN; DRS. STROBEL AND WILDER; MR. ALLENSON  
AND MR. POWELL; AND ASSISTANTS

61. FUNDAMENTALS OF ANALYTICAL CHEMISTRY.—A study of the reactions of electrolytes in solution and of chemical equilibrium illustrated by laboratory experiments involving the techniques of gravimetric, volumetric, and colorimetric analysis. One lecture, one recitation and six laboratory hours. Prerequisites: Chemistry 1-2, and Mathematics 6 or equivalent. 4 s.h. (w)

PROFESSORS SAYLOR AND VOSBURGH; DRS. STROBEL AND WILDER;  
MR. ALLENSON AND MR. POWELL; AND ASSISTANTS

70. QUANTITATIVE ANALYSIS.—A study of the theory and technique of inorganic gravimetric and volumetric analysis. One lecture, one recitation, and six laboratory hours. Prerequisite: Chemistry 61. 4 s.h. (w)

PROFESSORS SAYLOR AND VOSBURGH; DRS. STROBEL AND WILDER;  
MR. ALLENSON AND MR. POWELL; AND ASSISTANTS

131. ADVANCED QUANTITATIVE ANALYSIS.—A second course in the theory and technique of inorganic analysis with special reference to the analysis of complex materials. One lecture and six laboratory hours. Prerequisite: Chemistry 70. 3 s.h. (w)

PROFESSORS VOSBURGH AND SAYLOR AND ASSISTANT

151-152. ORGANIC CHEMISTRY.—An introduction to the study of the compounds of carbon. Both the aliphatic and the aromatic series are dealt with and the lectures are illustrated by selected laboratory experiments. Two lectures, one recitation, and three laboratory hours. Prerequisite: Chemistry 61. Course 151 is prerequisite for 152. 8 s.h. (w)

PROFESSORS BIGELOW AND HAUSER; ASSOCIATE PROFESSORS BRADSHAW  
AND BROWN; DR. WILDER; AND ASSISTANTS

206. ELEMENTS OF THEORETICAL CHEMISTRY.—A course in general theoretical chemistry for students who do not present credit in calculus. Credit is not given for both 206 and 261-262. Three recitations and three laboratory hours. Prerequisites: Chemistry 70, 151-152, Physics 51-52 or 1-2 and Mathematics, 6 s.h. With the permission of the Director of Graduate Studies, graduate students from other departments may offer other advanced science courses in place of some of these prerequisites. 4 s.h. (w)

PROFESSORS SAYLOR AND HOBBS

215-216. ADVANCED INORGANIC CHEMISTRY.—A study of modern theories of valence and molecular structure; also of inorganic compounds, particularly the less common types, illustrated by suitable laboratory preparations. Prerequisites: chemistry 70, 151-152, and 261-262. 6 s.h. (w)

PROFESSOR VOSBURGH AND ASSOCIATE PROFESSOR HILL

233. INSTRUMENTAL ANALYSIS.—Experiments in the use of physical measuring instruments in chemical analysis with special attention to optical instruments. One lecture and three laboratory hours. Prerequisites: Chemistry 70 and one year of physics. 2 s.h. (w)

PROFESSORS HOBBS, SAYLOR AND VOSBURGH

234. PHYSICO-CHEMICAL METHODS OF ANALYSIS.—Discussion of physico-chemical principles as applied to methods of instrumental analysis, illustrated by laboratory experiments with emphasis on methods involving electrical techniques. One lecture and three laboratory hours. Prerequisites: Chemistry 70 and either 261-262 or 206; either of the latter may be taken concurrently. 2 s.h. (w)

PROFESSORS HOBBS, SAYLOR AND VOSBURGH

236. THEORY OF ANALYTICAL CHEMISTRY.—A study of such topics as precision and errors, theories of precipitation and titration, oxidation and reduction, and others, illustrated by typical analytical methods. One lecture. Prerequisites: Chemistry 70 and 261-262. 1 s.h.

PROFESSOR VOSBURGH



251. **QUALITATIVE ORGANIC ANALYSIS.**—Systematic identification of organic compounds, including a study of solubilities and classification reactions. One lecture and six laboratory hours. With permission of the Director of Graduate Studies, graduate students may take three hours of laboratory work instead of six and receive 2 semester hours credit. Prerequisites: Chemistry 70 and 151-152. 3 s.h. (w) PROFESSOR HAUSER AND ASSISTANTS

252. **ADVANCED ORGANIC PREPARATIONS.**—A laboratory course including experiments of a more difficult type than those required on the elementary level, accompanied by oral discussions of the techniques and theories involved, and designed to round out the student's knowledge of fundamental organic processes. Three or six laboratory hours. Prerequisites: Chemistry 70 and 151-152. 1 or 2 s.h. (w) ASSOCIATE PROFESSOR BROWN AND PROFESSOR BIGELOW

253-254. **ADVANCED ORGANIC CHEMISTRY.**—Discussion of the theories of organic chemistry with special reference in the first semester to the mechanism of reactions and in the second semester to the synthesis of some of the more complex compounds such as vitamins, hormones, and alkaloids. Undergraduates are admitted to this course only by permission of the Director of Undergraduate Studies. Prerequisites: Chemistry 70 and 151-152. 4 s.h. PROFESSORS BIGELOW AND HAUSER

261-262. **PHYSICAL CHEMISTRY.**—Fundamentals of general theoretical chemistry illustrated by selected laboratory experiments. Two recitations and three laboratory hours. Prerequisites: Chemistry 70, 151-152, Physics 51-52 or 1-2 and Mathematics 51-52 or equivalent. 6 s.h. PROFESSORS HOBBS AND SAYLOR

271. **INTRODUCTION TO RESEARCH.**—Lectures on the use of chemical literature, research methods, recording and publication of results, and other topics. One lecture. 1 s.h. (w) ASSOCIATE PROFESSOR BROWN

275-276. **RESEARCH.**—The aim of this course is to give instruction in methods used in the investigation of original problems. It is open to seniors by permission of the Director of Undergraduate Studies. Nine hours a week and conferences. 3 or 6 s.h. (w) PROFESSORS BIGELOW, GROSS, HAUSER, HOBBS, LONDON, SAYLOR AND VOSBURGH; ASSOCIATE PROFESSORS BRADSHIR, BROWN AND HILL

#### DEPARTMENTAL MAJOR

A. For the degree of A. B.

*Prerequisites:* Chemistry 1-2, Mathematics 6 s.h.

*Major Requirements:* Chemistry 61, 70, 151-152, and an additional 6 or 7 s.h., which may be satisfied by 261-262 or by 206 together with 2 or 3 s.h. selected from courses 131, 233, 234 and 251. The related work must include one year of Physics.

B. For the degree of B.S.

*Prerequisites:* Chemistry 1-2, Mathematics 6 s.h.

*Major Requirements:* Chemistry 61, 70, 131, 151-152, 234, 251, 261-262. The related work must include Mathematics 51-52 and one year of Physics.

#### ECONOMICS AND BUSINESS ADMINISTRATION

PROFESSOR HOOVER, CHAIRMAN; PROFESSOR DE VYVER, DIRECTOR OF UNDERGRADUATE STUDIES; PROFESSORS BLACK, HUMPHREY, RATCHFORD, SIMMONS, SMITH, SPENGLER, AND VON BECKERATH; ASSOCIATE PROFESSORS HANNA, LONDON, LEMERT, MANN, AND SHIELDS; ASSISTANT PROFESSORS ASHBROOK, DEWEY, JOFRG, MCKENZIE, AND SAVILLE; MESSRS. BRANDIS, DICKENS, EASTMAN, ENMA, HYLBURG, MANSFIELD, AND WALTFR

The courses offered by the Department are listed under two divisions, Economics and Business Administration.

In general, the Economics courses aim to develop in the student such critical and analytical skills as underlie the ability to understand economic problems and institutions, both in their contemporary and in their historical setting. While no particular vocational or professional goal is emphasized, these courses furnish the academic background necessary for many positions in industry, for work in the economic branches of government service, and for graduate study in economics and the social sciences.

Courses in Business Administration, although more concerned with general principles than with specific applications, stress in greater measure than courses in Economics the knowledge and techniques useful to students definitely preparing for business careers. The student who majors in Business Administration may elect courses in accountancy, business law, and related work, sufficient to qualify for admission to C.P.A. examinations.

### ECONOMICS

12. AMERICAN ECONOMIC INSTITUTIONS.—A survey of the main economic factors, trends, and institutions in the development of American society, including such topics as the economics of the frontier, the economic basis of regionalism, tariff policies, imperialism, capital accumulation, monopoly, modern technology and mass production, labor movements, and corporate enterprise. 3 s.h. (w) PROFESSOR SMITH

51-52. PRINCIPLES OF ECONOMICS.—6 s.h. (E & w)

STAFF

This course must be passed by all students planning to elect further courses in Economics and Business Administration.

One section of Economics 51 will be offered during the spring semester, and one section of Economics 52 will be offered during the fall semester.

103. TRANSPORTATION.—Essential features, problems, and competitive positions of rail, highway, air, and inland-water transportation, with most emphasis on rail transportation. Special attention is given to the economic significance of transportation, and to cost factors, rates and their economic effects and regulations. 3 s.h. (w) ASSOCIATE PROFESSOR LONDON

107. CONSERVATION.—A study of the extent and distribution of our natural resources and their service in regional and national development. Emphasis will be placed upon both the natural and human factors involved in the genesis of current problems. Term reports dealing with problems of special interest to those participating will be considered. 3 s.h. (w) ASSOCIATE PROFESSOR LEMERT

132. THE ECONOMIC HISTORY OF THE UNITED STATES.—A study of the agricultural, industrial, commercial, and financial progress of the United States from colonial times to the present day. 3 s.h. (w) PROFESSOR SMITH

138. BUSINESS STATISTICS.—A survey of the principal statistical methods and their application to economics and business administration. The course deals with collection of statistical data, construction of statistical tables and charts, and a brief study of the fundamental statistical concepts and techniques. Prerequisite: Mathematics 5 or the equivalent. Offered both semesters. 3 s.h. (w) ASSOCIATE PROFESSOR HANNA

Open to juniors and to sophomores in the second semester. Not open to seniors except with the permission of the Director of Undergraduate Studies.

152. GLOBAL GEOGRAPHY.—The subject matter involves resources patterns and world affairs, geonomic problems, geocultural problems, and geographic factors affecting geopolitical questions. No prerequisite. 3 s.h. (w) ASSOCIATE PROFESSOR LEMERT

153. MONEY, CREDIT AND BANKING.—This course begins with a study of the nature, characteristics, and functions of money, credit, and the commercial banking system. It covers also the history of commercial banking in the United States; the foundation, organization, and functions of the Federal Reserve System; the supervision and control of commercial banks; deposit insurance; and the value of money. 3 s.h. (w) PROFESSOR SIMMONS; PROFESSOR RATCHFORD; ASSISTANT PROFESSORS ASHBROOK AND SAVILLE; MR. BRANDIS

155. LABOR PROBLEMS.—An examination of present-day labor problems followed by an intensive study of methods used by employers and workers in meeting those problems. 3 s.h. (w) PROFESSOR DE VYVER

161. **EUROPEAN ECONOMIC PROBLEMS.**—This course deals with the losses and economic dislocations of the war, the problem of developing a new pattern of intra-European and world trade, the effort to stabilize prices, expand investments and production, and the effect of economic planning and controls. 3 s.h. (w) PROFESSOR HUMPHREY

169. **ECONOMICS OF CONSUMPTION.**—Economic problems of the family. Factors determining choice; commercial and legal standards for consumer's goods; consumer credit and co-operation; income and standards of living. 3 s.h. (E) ASSISTANT PROFESSOR SAVILLE

186. **LATIN-AMERICAN ECONOMICS.**—Facts and factors in the economic structure and growth of the Latin-American nations; population, labor productivity, and standards of living; problems of industry, agriculture, and mining; transportation and public utilities; monetary and fiscal policies; the migration of capital; economic thought and institutions. 3 s.h. (w) PROFESSOR SMITH

187. **PUBLIC FINANCE.**—This is a general course in the principles of public finance. It covers the constitutional, economic, and administrative aspects of public revenues, public expenditures, public debts, and intergovernmental fiscal relations. Special attention is given to current trends and problems. 3 s.h. (w) PROFESSOR RATCHFORD

189. **BUSINESS AND GOVERNMENT.**—This course deals with the economics of public policy regarding such matters as business combinations, corporate organizations, industrial price policies, marketing practices, economic planning, cartels, and similar problems of governmental regulation of business. 3 s.h. (w) PROFESSOR HUMPHREY; ASSISTANT PROFESSOR ASHBROOK

199. **ECONOMIC ANALYSIS.**—A study of the theory of price and output with particular attention to the effects of imperfect competition. 3 s.h. (w) ASSISTANT PROFESSOR MCKENZIE

204. **ADVANCED MONEY AND BANKING.**—Structure and functioning of the monetary and banking mechanism. Presupposes a thorough grounding in the field. Particular attention is given to significant areas involving issues of economic policy. Primary emphasis is placed upon the underlying basis of monetary management and upon its implementation by the central banking authorities. 3 s.h. (w) PROFESSOR SIMMONS

215. **ECONOMIC SYSTEMS.**—A study of alternative economic systems. In addition to an analysis of communism, anarchism, and the variants of socialism, the course will include a consideration of other proposed modifications of the existing economic order. Particular attention is given to an analysis of the Soviet economic system. 3 s.h. (w) PROFESSOR HOOVER

216. **ECONOMIC FUNCTIONS OF THE STATE.**—A consideration of the primary and secondary economic functions of government and of the legislation which provides for the performance of these functions. Prerequisite: Economics 215 or its equivalent. 3 s.h. (w) PROFESSOR HOOVER

217. **POPULATION PROBLEMS AND RESOURCES.**—Survey of population theory and policy. Study of national and international trends in population—growth and resource—use, together with analyses of their economic and social implications. 3 s.h. (w) PROFESSOR SPENGLER

218. **BUSINESS CYCLES.**—A study of the various types of cyclical movements in industry, with special emphasis on cycle theory and methods of controlling or modifying business cycles. 3 s.h. (w) PROFESSOR HUMPHREY

231. **ECONOMIC HISTORY OF EUROPE.**—The economic development of Europe from medieval times to the present, treating such topics as the guilds, mercantilism, money, banking, crises, the Industrial Revolution, the interrelationships of government and business, and the economic consequences of war. 3 s.h. (w) PROFESSOR SMITH

233. STATE AND LOCAL FINANCE.—A study of expenditures, taxation, and financial administration in state and local governments with emphasis on current problems. Special attention will be given to research methods and materials and to the financial relations between state and local governments. Prerequisite: Economics 187 or consent of instructor. 3 s.h. (w) PROFESSOR RATCHFORD

234. FEDERAL FINANCE.—A study of the expenditures, revenues, and financial administration of the government of the United States, with emphasis on current problems. Special attention given to budgetary procedure, corporate and individual income taxes, and the financial relations between Federal and state governments. Prerequisite: Economics 187 or consent of instructor. 3 s.h. (w) PROFESSOR RATCHFORD

236. TAXATION AND GOVERNMENT FINANCE.—A basic course in public finance for advanced students. Primary emphasis is placed on taxation and tax policy, with consideration also of government expenditures, financial administration, intergovernmental fiscal relations, and public debts. Readings in texts, monographs, and source materials will be supplemented by lectures, class discussions and reports on special topics. Not open to students who have received credit for Economics 187 or equivalent. 3 s.h. (w) PROFESSOR RATCHFORD

237-238. STATISTICAL METHODS.—A study of statistical methods appropriate for dealing with problems in business and the social sciences. In addition to developing more thoroughly the subjects considered in Business Statistics, the following methods will be considered: simple, multiple, partial, and curvilinear correlation; curve fitting; probability; frequency distributions; and reliability of estimates. Prerequisite: Economics 138 or consent of the instructor. Either semester may be taken for credit. 6 s.h. (w) ASSOCIATE PROFESSOR HANNA

241-242. VALUE AND DISTRIBUTION.—This course is a critical survey of the leading contemporary explanations of price formation and of the determination of interest, rent, wages, and profits. 6 s.h. (w) PROFESSOR SPENGLER

245. PROBLEMS OF MODERN INDUSTRIALISM.—Description and analysis of the growth of modern industrialism of the structure and operation of large scale industry, of the inter-relations of industrial, political, and legal development, and of the implications for industry of the modern welfare state. 3 s.h. (w) PROFESSOR VON BECKERATH

256. LABOR LEGISLATION.—A study of the relations of the state to labor problems with special reference to remedial legislation and to interference in labor disputes. Prerequisite: Economics 155, or with the consent of the instructor. 3 s.h. (w) PROFESSOR DE VYVER

260. SOCIAL INSURANCE.—A consideration of the economic and social problems involved in workmen's compensation laws, unemployment insurance, old-age pensions, and health insurance for workers. Particular attention will be given to the present Federal and state social security legislation. 3 s.h. (w) PROFESSOR DE VYVER

265. INTERNATIONAL TRADE AND FINANCE.—A study of the fundamental principles of international trade and foreign exchange. Subjects covered will include international specialization, balance of payments, foreign investments, tariffs and commercial policies, exchange control, exchange rates, and international monetary problems. 3 s.h. (w) MR. EASTMAN

268. COMPETITIVE VERSUS MONOPOLISTIC ENTERPRISE.—A study of monopoly and imperfect competition as disturbances of a free, self-regulating market economy in an individualistic democratic political system; of the possibilities of public and private action respecting the preservation of these systems; and of the implications of planning and public welfare policies. 3 s.h. (w) PROFESSOR VON BECKERATH

280. ADVANCED ECONOMIC PROBLEMS.—This course is designed to afford students an opportunity to integrate the economic principles which they have acquired in specialized courses, through the application of these principles to current economic problems. Not open to graduate students. 3 s.h. (w)



## BUSINESS ADMINISTRATION

## A. ACCOUNTANCY

57-58. **PRINCIPLES OF ACCOUNTING.**—Elementary principles of single proprietorship, partnership, and corporation accounting. Supervised laboratory periods will be assigned. 6 s.h. (w) STAFF

60. **GENERAL ACCOUNTING.**—A one semester course in accounting principles designed for economics majors and other non-business administration students who desire some understanding of basic accounting concepts. This course is required of economic majors who do not take Course 57-58. It must be taken in the sophomore or junior year. Students may not receive credit for both Course 60 and Course 57-58. 3 s.h. (w) PROFESSOR DE VYVER; MR. EMMA

171-172. **ADVANCED ACCOUNTING.**—Advanced accounting theory and practice applied to the managerial problems of valuation and operation in corporations, consolidations, mergers, and liquidations. Open to students who have completed Economics 57-58. 6 s.h. (w) ASSOCIATE PROFESSOR SHIELDS

173-174. **AUDITING, THEORY AND PRACTICE.**—This course is primarily concerned with preparing the student to enter public accounting practice, but some attention is given to internal auditing. During the first semester, auditing techniques and methods are studied through the use of an audit practice set. The work of the second semester deals with matters of auditing and accounting policy examined from the standpoints of the supervising accountant, the business manager, and the investor. Prerequisite: Economics 171-172 and the permission of the department. 6 s.h. (w) ASSOCIATE PROFESSOR MANN

175-176. **C. P. A. REVIEW.**—Thorough practice in classroom to prepare candidates for the Certified Public Accountant examination. The object is to train students to apply accounting principles and to work in classroom under substantially the same conditions as in the examination room. Practical accounting problems, auditing analysis and theory of accounts. Prerequisite: Economics 171-172 and permission of the department. 6 s.h. (w) PROFESSOR BLACK

177. **INCOME TAX ACCOUNTING.**—A study of the accounting principles involved in the management of business enterprise under the requirements of Federal income tax laws. Practice is given in the preparation of tax returns. Prerequisite: Economics 171-172 or permission of the instructor. 3 s.h. (w) ASSOCIATE PROFESSOR SHIELDS

178. **ACCOUNTING SYSTEMS.**—The design and installation of accounting systems and the presentation of accounting reports to management in basic manufacturing industries, mercantile establishments, financial institutions, and municipalities. Prerequisite: Economics 171-172 or permission of the instructor. 3 s.h. (w) ASSOCIATE PROFESSOR SHIELDS

180. **GOVERNMENT ACCOUNTING.**—Accounting principles and methods used in the control and administration of governmental units. Emphasis is placed upon state, county, and municipal governments. Prerequisite: Economics 57-58 and permission of the instructor. 3 s.h. (w) ASSOCIATE PROFESSOR SHIELDS

275-276. **ADVANCED INDUSTRIAL ACCOUNTING AND MANAGEMENT.**—This course traces the ways and means of executive control through statistics and industrial accountancy. Emphasis is put upon the economics of overhead costs. A complete practice set of cost accounting is worked by each student during the course. Prerequisite: Economics 171-172 and permission of the department. 6 s.h. (w) PROFESSOR BLACK

## B. COMMERCE AND INDUSTRY

11. **ECONOMIC GEOGRAPHY.**—A course in regional economic geography embracing the study of the world's major geographic regions, their present and potential production of food and raw materials for manufacture, and the relationships between these factors and the development of manufacturing industries, cities, and commerce. Offered both semesters. 3 s.h. (E & W) ASSOCIATE PROFESSOR LEMERT; MR. MANSFIELD



105. **INDUSTRIAL MANAGEMENT.**—This course deals primarily with the elements and problems of managing the operations of an industrial firm. Topics treated include the functions and responsibilities of management, qualities required in executives, organization, location, the physical plant, materials control, the planning and control of operations, industrial and market research, personnel, budgeting, purchasing, and records and reports. Offered both semesters. 3 s.h. (w) ASSOCIATE PROFESSOR LANDON; MR. WALTER

109. **THE ECONOMIC GEOGRAPHY OF LATIN AMERICA.**—This course involves comprehensive study of the resources and people of Mexico, the West Indies, and Central and South America. Special emphasis is placed upon the possibilities and limitations of increases in trade between the United States and the leading Latin-American countries. 3 s.h. (w) ASSOCIATE PROFESSOR LEMERT

115. **FUNDAMENTALS OF GEOGRAPHY.**—A study of geographic influences consisting of location, maps and their interpretation, climate topography, soils, minerals, bodies of water, plants, animals, and the works of man. This course is required of all students in Teaching Group, Class B, and is also recommended for those intending to specialize in foreign trade or the diplomatic service. 3 s.h. (E) ASSOCIATE PROFESSOR LEMERT

116. **PRINCIPLES OF ECONOMIC GEOGRAPHY.**—A study of the economic resources of the world; the products of the agricultural and manufacturing industries; trade routes and trade centers; and influence of geographic factors on the economic development of nations. This course is recommended for those intending to specialize in foreign trade or the diplomatic service. Prerequisite: Economics 115. 3 s.h. (E) ASSOCIATE PROFESSOR LEMERT

118. **ECONOMIC GEOGRAPHY OF THE SOUTH.**—A study of the agricultural, commercial, and industrial development, with special emphasis upon the expansion of Piedmont industries. 3 s.h. (w) ASSOCIATE PROFESSOR LEMERT

120. **ECONOMIC GEOGRAPHY OF THE PACIFIC.**—The physical influences, natural resources, and economic activities of Asia, Oceania, and portions of the western coasts of North and South America with special emphasis upon their relationship to present developments. 3 s.h. (w) ASSOCIATE PROFESSOR LEMERT

143. **CORPORATION FINANCE.**—Principles and problems in the financial organization of corporations; the study of corporate securities, the management of capital, the distribution of earnings; industrial combinations; insolvency and reorganization. Though not a prerequisite, Economics 57-58, Principles of Accounting, or Economics 60, General Accounting, are recommended to students electing this course. Offered both semesters. 3 s.h. (w)

ASSISTANT PROFESSOR JOERG; MR. DICKENS

144. **INVESTMENTS.**—A study of the investment policies of individuals and institutions; the securities markets; sources of investment information and data; the analysis and interpretation of financial statements. Prerequisites: Economics 57-58 or 60, and 143. 3 s.h. (w) ASSISTANT PROFESSOR JOERG

158. **INSURANCE.**—The development and basic principles of insurance. This course covers such topics as business uses, policy contracts, costs, and regulation of insurance. Life and fire insurance are emphasized. Offered both semesters. 3 s.h. (w) ASSISTANT PROFESSOR SAVILLE

168. **MARKETING.**—The topics covered in this course include the economic importance of markets and the marketing system; marketing functions, organization, and methods, price policies; finance; speculation; market research and the planning of marketing activities; co-operative marketing; criticism of marketing and means for improvement; and regulation. 3 s.h. (w) ASSOCIATE PROFESSOR LANDON

181-182. **BUSINESS LAW.**—The fundamental principles of law as applied to common business transactions. The topics presented are: contracts, agency, bailments, sales, negotiable instruments, partnerships, corporations, and bankruptcy. For seniors. 6 s.h. (w) MR. HYLBURG

184. **COMMERCIAL LAW FOR ACCOUNTANTS.**—A review and summation of commercial law principles as they apply to accounting theory and practice. Emphasis will be placed upon the commercial law sections of the Certified Public Accountant examinations. Students are admitted to the course by permission of the instructor. *For seniors.* 3 s.h. (w)  
 PROFESSOR BLACK

188. **PERSONNEL MANAGEMENT.**—A study of the fundamental principles and problems of labor management and of collective bargaining under modern industrial conditions and under existing labor legislation. Prerequisite: Economics 155. 3 s.h. (w)  
 PROFESSOR DE VYVER

#### DEPARTMENTAL MAJOR

A major in economics requires the following election of courses:

##### A

Economics 51-52. Principles of Economics.

Economics 60, or 57-58. Principles of Accounting.

Economics 138. Business Statistics.

Economics 153. Money, Credit and Banking.

Mathematics 5.

##### B

Eighteen semester hours in junior and senior courses in economics (not business administration) of which six semester hours are restricted to the following group of courses:

Economics 199. Economic Analysis.

Economics 204. Monetary and Banking Theory.

Economics 215. Economic Systems.

Economics 217. Population Problems.

Economics 218. Business Cycles.

Economics 231. Economic History of Europe.

Economics 234. Federal Finance.

Economics 245. Modern Industrialism.

Economics 256. Labor Legislation.

Economics 265. International Trade.

Students majoring in Economics are restricted by the general Faculty Regulation which limits course work in Economics and Business Administration to 54 semester hours with not over 36 semester hours in either of the department's subdivisions Economics and Business Administration.

#### EDUCATION

PROFESSOR CARR, ACTING CHAIRMAN; ASSOCIATE PROFESSOR EASLEY, DIRECTOR OF UNDERGRADUATE STUDIES; PROFESSORS CHILDS, NAHM AND PROCTOR; ASSOCIATE PROFESSORS BOLMEIER, RUDISILL, STUMPF AND WEITZ; ASSISTANT PROFESSORS INGLES, MASSEY, MOSER, AND SMITH; MR. SLAY; AND ASSISTANTS

Courses in the Department of Education are designed for two groups of students: (1) students with teaching experience or others who have definitely chosen teaching as their life-work, and (2) students who desire to study the school as an outstanding social institution. The courses listed in Nursing Education are for students preparing to teach in schools of nursing.

Students who do not expect to teach but merely desire an understanding of the school as part of a liberal education are advised to elect such courses as 54, 84, 88, and 105 for their introductory work in the Department and then to elect further work in accordance with their special interests. Students who expect to

teach in the public schools should plan their courses in accordance with the general regulations set forth under Teaching on page 86 of this catalogue. *All prospective teachers must enroll in courses 84 and 88, preferably before their junior year. They are then required to complete courses 103 and 118 before taking either 101-102 or 115-116 in their senior year.*

1. ORIENTATION IN STUDY AND STUDY HABITS.—A course for freshmen whose high-school and other records indicate the need for help in working out satisfactory study methods and in adjusting to college life. Note-taking from reading and lectures, time planning, remedial reading, and pertinent principles of the psychology of learning are among the matters considered. *Either semester. 3 s.h. (w)*  
PROFESSOR PROCTOR AND ASSISTANTS

6. A LABORATORY COURSE IN READING.—A laboratory course for the improvement of the reading skills of students handicapped by reading deficiencies. Admission to the class is obtained through recommendation of a counselor. Two class periods per week, and individual conferences and practice as prescribed. (Non-credit.) (E)  
ASSOCIATE PROFESSOR RUDSILL

54. INTRODUCTORY COURSE IN HISTORY OF EDUCATION.—A study of the types of educational systems and institutions evolved in Western Europe and the United States as an introduction to current educational problems. 3 s.h. (E)  
[Not offered in 1951-52]

68. MENTAL HYGIENE OF THE SCHOOL CHILD.—A study of personality factors as related to the adjustment and success of the school child; the foundations of motivation; typical problems of maladjustment; social heredity and its educational implications; variations in intelligence. Not open to students who have had Psychology 116. 3 s.h. (E)  
ASSOCIATE PROFESSOR EASLEY  
[Not offered in 1951-52]

84. SOCIAL FOUNDATIONS OF EDUCATION.—This course is the first of four intended to give the student a thorough survey of the place and function of education and an understanding of the school as a social institution. It is an introductory course emphasizing those historical, philosophical, and sociological factors which explain trends in American education. *Either semester. 3 s.h. (w & E)*  
ASSOCIATE PROFESSOR STUMPF AND MR. SLAY

NOTE: Courses 84, 88, 103, and 118 constitute a sequence of 12 hours in Education required of all prospective teachers. Students who intend to teach in the elementary school should confer with Professor Carr, and students who intend to teach in the secondary school should confer with Professor Childs, in order to work this sequence into their schedules. See courses under Nursing Education for modified sequence of courses for students preparing to teach in schools of nursing.

88. EDUCATIONAL PSYCHOLOGY: LEARNING AND MEASUREMENT.—This course and Education 118 constitute a general introduction to the field of Educational Psychology. This course deals with (1) the psychology of learning, including: the nature of the learning process; general principles or laws of learning; the course of learning and forgetting; factors influencing efficiency in learning and retention; and the transfer of training; and (2) measurement, including: the basic concepts in the measurement of intelligence; standardized achievement tests; the extent and significance of individual differences in ability and performance. Opportunity will be afforded for examination and study of a variety of tests of intelligence and achievement. *Either semester. 3 s.h. (E)*  
ASSOCIATE PROFESSOR RUDSILL

See note following course 84.

101-102. ELEMENTARY EDUCATION: PRINCIPLES AND PRACTICE.—The study of the nature, subject matter, and methods of elementary education. The course is designed to give prospective elementary teachers an understanding of basic principles and practices in the organization of instruction and of subject matter for the primary and grammar grades of the public school. Students may elect primary or grammar-grade work, according to their special interests. A minimum of ninety clock hours of observation and supervised practice teaching is

required. The specific problems which arise in the student teachers' experiences are treated in group and individual conferences. *For seniors only.* 8 s.h. (E)

PROFESSOR CARR AND ASSISTANTS

A. INTEGRATED ART IN THE PUBLIC SCHOOL.—This course consists of three semester hours of work in materials and methods. (Required of all students intending to teach in the elementary school.) *For juniors and seniors.* (E)

MRS. MASON

B. INDUSTRIAL ART IN THE PUBLIC SCHOOL.—This course consists of three semester hours of work in materials and methods. (Required of all students intending to teach in the elementary school.) *For juniors and seniors.* (E)

MRS. MASON

103. ORGANIZATION AND MANAGEMENT OF THE SCHOOL.—An introduction to the problems of school organization and administration which are of particular concern to the classroom teacher. Although federal and state control over education is briefly reviewed, the main consideration is the local school system. Considerable attention is given to the administration of teaching personnel, pupil personnel, and the program of studies. *Either semester.* 3 s.h. (E)

ASSOCIATE PROFESSOR BOLMEIER AND ASSISTANT

See note following course 84.

105. INTRODUCTION TO EDUCATIONAL SOCIOLOGY.—A study of the social forces, processes, and values affecting education, and the interaction of school and community. 3 s.h. (E)

PROFESSOR CHILDS

115-116. SECONDARY EDUCATION: PRINCIPLES AND PRACTICE.—A study of the nature, scope, and methods of secondary education, emphasizing fundamentals of the teaching process and exemplifying theory by practice. A minimum of ninety clock hours of observation and supervised practice teaching is required. Students preparing to teach in the junior high school are permitted to concentrate in that field. *Since practice-teaching facilities are limited, students with superior records will be given preference in the practice teaching.* *For seniors only.* 8 s.h. (E)

PROFESSOR CHILDS AND ASSISTANTS

118. EDUCATIONAL PSYCHOLOGY: PSYCHOLOGICAL DEVELOPMENT.—This course traces the psychological development of the individual from infancy to maturity. The principal topics considered are: the interdependence of hereditary and environmental factors in development, the nature of the developmental process, the establishment of the early basic patterns of behavior, changes and conditions producing these changes throughout childhood and adolescence to maturity, and the origin and treatment of minor behavior disorders. To the degree practicable, students will observe children in typical and atypical situations as a means of securing concrete data on the problems treated in the course. Not open to students who have had Psychology 121 or 126. Prerequisite: three semester hours in psychology or educational psychology. *Either semester.* 3 s.h. (E)

ASSOCIATE PROFESSOR EASLEY

See note following course 84.

128. TESTS AND MEASUREMENTS IN PERSONNEL WORK.—A critical study of the principles and techniques of measurement in industrial, social, and educational personnel work. The course attempts to serve three purposes: (1) to acquaint the students, as a matter of cultural interest, with the rapidly expanding field of personnel study; (2) to provide a basis of technical training to enable the student to develop himself professionally after he enters personnel work; and (3) to provide a basis for personnel vocational orientation. 3 s.h. (w)

[Not offered in 1951-52]

142. CHILDREN'S LITERATURE.—Students enrolled will be allowed to specialize in literature of either the primary or the grammar grades. 3 s.h. (E)

PROFESSOR CARR AND ASSOCIATE PROFESSOR RUDISIL



176. MATERIALS AND METHODS IN HIGH-SCHOOL SCIENCE.—Discussion based upon lectures and collateral reading of such topics as aims, tests for values, the curriculum, classroom procedure, course and lesson planning in secondary school science. Prerequisite: at least 18 hours of science in college. *For seniors only.* 3 s.h. (E) PROFESSOR KRAMER

203. PRINCIPLES OF SCHOOL ADMINISTRATION.—The fundamental facts and procedures of school administration, an analysis of the problems and policies of the organization and direction of a local school system, and the functions of the various school officials. Prerequisite: six semester hours in education. 3 s.h. (E) ASSOCIATE PROFESSOR BOLMEIER

205. CURRICULUM PROBLEMS IN SECONDARY EDUCATION.—A consideration of the aims and objectives of secondary school subjects, emphasizing practical problems of curriculum-making in the high school. 3 s.h. (E) [Not offered in 1951-52] PROFESSOR CHILDS

206. SOCIOLOGICAL FOUNDATIONS OF THE SECONDARY SCHOOL SUBJECTS.—A consideration of the aims and objectives of secondary school subjects, emphasizing problems of curriculum-making. Prerequisite: general sociology or approved work in education, including course 105. 3 s.h. (E) PROFESSOR CHILDS

207. TECHNIQUE OF TEACHING.—An advanced course in the teaching process, dealing with the theory underlying sound technique and applied specifically to the work of the elementary school. 3 s.h. (E) [Not offered in 1951-52] PROFESSOR CARR

208A. MENTAL TESTS AND APPLICATIONS.—A study of the development of intelligence testing, the concept of general intelligence, various recent applications of mental tests and training in the giving of individual tests. Prerequisite: course 258 or six semester hours of other work in educational psychology or psychology. 3 s.h. (E) ASSOCIATE PROFESSOR EASLEY

208B. MENTAL TESTS AND APPLICATIONS.—A continuation of course 208A intended to provide experience in the administration of mental tests and in the interpretation of data. Open only to students approved by the instructor. 2 s.h. (E) ASSOCIATE PROFESSOR EASLEY

209. STATISTICAL METHODS APPLIED TO EDUCATION.—A study of statistical methods of treating educational and social data designed to enable teacher or administrator to interpret and use the results of scientific investigations in education. 3 s.h. (E) ASSOCIATE PROFESSOR EASLEY

212. PSYCHOLOGY OF THE ELEMENTARY SCHOOL SUBJECTS.—A study of the psychology of learning as applied to teaching the common school subjects. 3 s.h. (E) [Not offered in 1951-52] PROFESSOR CARR

213. PROBLEMS IN THE ORGANIZATION AND ADMINISTRATION OF THE ELEMENTARY SCHOOL.—A study of the work of the elementary school principal. 3 s.h. (E) PROFESSOR PROCTOR

214. HISTORY OF EDUCATION IN THE UNITED STATES.—A study of the development of the American public school and the interaction of higher education and the public school. 3 s.h. [Not offered in 1951-52]

215. EDUCATIONAL AND VOCATIONAL GUIDANCE.—A survey of the literature on guidance with special reference to secondary education; a critical study of the principles and techniques used in guidance; an attempt to locate the problems most urgently in need of solution. Prerequisite: 12 semester hours in the Department, including course 105 or course 206. 3 s.h. (E) [Not offered in 1951-52] PROFESSOR CHILDS

216. PSYCHOLOGICAL PRINCIPLES OF SECONDARY EDUCATION.—A study of adolescence and the psychology of learning as applied to teaching the principal high-school subjects. 3 s.h. (E) PROFESSOR CHILDS



222. THE CURRICULUM AND MATERIALS OF THE ELEMENTARY GRADES.—A study of curriculum problems in the elementary schools. 3 s.h. (E)  
[Not offered in 1951-52] PROFESSOR CARR

227. THE PSYCHOLOGY OF LEARNING: PROBLEMS.—The major problems related to the learning process will be examined with the experimental literature bearing on them. The curves of learning and forgetting, the distribution of practice, economical methods of learning, and the transfer of training will be the major topics considered. 3 s.h. (E)  
[Not offered in 1951-52] ASSOCIATE PROFESSOR EASLEY

228. THE PSYCHOLOGY OF LEARNING: THEORETICAL AND EXPERIMENTAL.—This is a continuation of course 227. In this semester the laws of learning, the most important explanatory principles, and the major systems of the psychology of learning will be considered. Class experiments will run throughout the semester. Prerequisite: course 227 or its equivalent. 3 s.h. (E)  
[Not offered in 1951-52] ASSOCIATE PROFESSOR EASLEY

232. SUPERVISION OF INSTRUCTION.—A survey of supervision as a means of improving instruction and adapting the curriculum to the learner and to community needs. 3 s.h. (E) PROFESSOR CARR

233. ADMINISTRATIVE PUPIL-ACCOUNTING.—An advanced study of gradation and classification of pupils, with incidental attention to the keeping of records and the making of reports. The study includes a consideration of individual differences, promotions, acceleration, and retardation of pupils; the various plans for classification and gradation; interpreting the results of tests; and some practice in the computation of statistical measures. 3 s.h. (E) PROFESSOR PROCTOR  
[Not offered in 1951-52]

234. SECONDARY-SCHOOL ORGANIZATION AND ADMINISTRATION.—This course is designed especially for principals, teachers, and other prospective members of the secondary-school staff. The scope of secondary education is considered to encompass junior high school, regular high school, senior high, and junior college. Special treatment is given to the problems of internal organization and management. 3 s.h. (E) ASSOCIATE PROFESSOR BOLMEIER

237. THE PSYCHOLOGY AND TEACHING OF READING.—A study of the basic psychology of reading and of principles, methods, and materials for the development of the various reading and study skills. Adapted to the needs of teachers of different grade levels. 3 s.h. (E) ASSOCIATE PROFESSOR RUDISILL

238. REMEDIAL READING—PRINCIPLES AND PRACTICE.—A study of the basic causes of reading disability and of principles, methods, and materials for the diagnosis and correction of specific difficulties. The course provides practice with grade school children suffering reading retardation, including testing, diagnosis, and remedial teaching. 3 s.h. (E) ASSOCIATE PROFESSOR RUDISILL

244. STUDIES IN THE HISTORICAL DEVELOPMENT OF PUBLIC SCHOOL ADMINISTRATION.—An advanced course devoted to the development of public school administration in the South, with especial reference to North Carolina as a type. 3 s.h. (w)  
[Not offered in 1951-52]

247. INVESTIGATIONS IN ARITHMETIC.—An analytical survey of investigations in arithmetic, with three purposes in view: (1) to examine the techniques employed with respect to their adequacy as means of solving the problems attacked; (2) to test the validity of the results announced and the values of these results for the teaching of arithmetic; (3) to locate further problems in arithmetic in need of scientific research. 3 s.h. (E)  
[Not offered in 1951-52]

253. LEGAL PHASES OF SCHOOL ADMINISTRATION.—The primary purpose of this course is to familiarize prospective school administrators with the legal features of school organization and administration. Although some attention is

given to constitutional and statutory provisions, the main emphasis is upon court decisions relating to education. Students are expected to select appropriate problems in school law for intensive study. 3 s.h. (E) ASSOCIATE PROFESSOR BOLMEIER

255. GUIDANCE FUNCTIONS OF THE CLASSROOM TEACHER.—A consideration of the philosophy, methods and tools of guidance appropriate to the classroom teacher. This course is designed for students who do not plan to become guidance specialists, but who wish to apply the principles and techniques of guidance. Prerequisites: twelve hours in either education, or psychology, or a combination of the two. 3 s.h. (E) ASSOCIATE PROFESSOR WEITZ

258. EDUCATIONAL MEASUREMENTS.—A critical study of the principles and techniques involved in measurement in education with opportunity for individual research. Prerequisite: 12 semester hours in the Department, including a course in educational psychology. 3 s.h. (E)

264. RECENT MOVEMENTS IN AMERICAN EDUCATION.—An intensive study of educational thought and practice since 1900. 3 s.h. (L)  
[Not offered in 1951-52]

### NURSING EDUCATION

Students preparing for administrative, teaching, or supervisory positions in schools of nursing must take, in addition to other courses, substantially the same basic program of work in Education as do prospective secondary school teachers, namely, courses 84, 88, 103, 115-116, and 118. Course 101N below is substituted for course 103 in this program. Courses 84N and 115N-116N are sections of courses 84 and 115-116, respectively, designed especially for nurses.

84N. SOCIAL FOUNDATIONS OF NURSING EDUCATION.—A special section of Education 84, applied to Nursing Education. A survey of major historical, philosophical, and sociological factors which have affected developments in nursing and nursing education. The purpose of the course is to give the student a better understanding of the place of nursing in present day society and the responsibilities of the individual nurse toward that society. 3 s.h. (w) ASSISTANT PROFESSOR INGLES

101N. THE CURRICULUM IN THE SCHOOL OF NURSING.—The general principles of curriculum making and the factors which determine the content and organization of the nursing school curriculum are considered in this course. 3 s.h. (w) ASSISTANT PROFESSORS SMITH AND INGLES

115N-116N. NURSING EDUCATION: PRINCIPLES AND PRACTICE.—A special section of Education 115-116. Principles of teaching applied to the nursing school situations and the planning and evaluation of instruction. Ninety hours of observation and of supervised teaching in the Duke University School of Nursing are required. Four hours of conference, observation, and practice teaching are required each week. Before beginning practice teaching students must complete thirty hours of observation. 8 s.h. (w) ASSISTANT PROFESSOR SMITH  
[Not open to students who have had course 115-116.]

117N. COMMUNITY NURSING SERVICE.—Designed for administrators, teachers, and supervisors in schools of nursing. Emphasis is on the integration of out-patient departments and community social and health agencies into the nursing school curriculum and on the preparation of nurses for community service. 3 s.h. ASSISTANT PROFESSOR MASSEY

120N. NURSING EDUCATION: PROBLEMS IN NURSING CARE.—Each student works on an individual problem designed to improve the nursing care of patients. 3 s.h. (w) ASSISTANT PROFESSORS INGLES AND MOSER

124N. NURSING EDUCATION: TEACHING OF THE NURSING ARTS.—In this course an effort is made to help prospective teachers to integrate the facts and principles of the natural, social, and medical sciences into the teaching of nursing arts. Though major emphasis is placed upon problems which are involved in teaching the first course, the concept of the nursing arts as an integral part of each clinical area is stressed. 3 s.h. (w) STAFF

130N. PSYCHOSOMATIC NURSING.—A study of the close relationship between mind and body in all illness, and of the techniques of observation and interview, both experimental and therapeutic. Lectures, clinics, conferences, discussions and experience with patients. 4 s.h. (w) ASSISTANT PROFESSOR MOSER

131N-132N. PSYCHIATRY AND PSYCHIATRIC NURSING.—An advanced study with special emphasis on personality development and the preventive and therapeutic aspects of psychiatry and psychiatric nursing. In the second semester the management of practical situations of increasing complexity is stressed. Lectures, clinics, conferences, discussions and experience with patients. 8 s.h. (w) ASSISTANT PROFESSOR MOSER

133N. SEMINAR IN PSYCHIATRIC NURSING.—Special study of areas such as behavior problems of children, projective tests, group therapy, mental hygiene clinics, etc. 3 s.h. (w) ASSISTANT PROFESSOR MOSER

134N-135N. ADVANCED MEDICAL AND SURGICAL NURSING.—A study of the medical and surgical aspects of selected diseases, aimed at giving the student a better comprehension of the total care necessary to bring about the best possible results for patients. Lectures, discussions, case histories, and planned observation and experience with patients. 8 s.h. (w) ASSISTANT PROFESSOR INGLES

136N. SEMINAR IN MEDICAL OR SURGICAL SPECIALTY.—Directed study in a selected medical or surgical specialty. Each student works on a problem of major interest to her. Individual research in the collection of original material. 3 s.h. (w) ASSISTANT PROFESSOR INGLES

192N. PRINCIPLES AND METHODS OF TEACHING IN SCHOOLS OF NURSING.—The primary purpose of this course is to help teachers in schools of nursing to understand and to utilize generally accepted principles of learning and to carry out a more effective teaching program in a school of nursing. Instruction is given in the planning of courses, in methods of teaching in classrooms and in hospital divisions, in construction of examinations, and in the utilization of other methods of determining the effectiveness of a teaching program. 3 s.h. ASSISTANT PROFESSOR SMITH

193N. WARD ADMINISTRATION AND TEACHING.—This course is designed to help head nurses better to understand their functions in planning and managing a program on a hospital division which will result in improved care of patients, greater satisfaction for professional and non-professional personnel, and a more adequate teaching program for students and others. 3 s.h. (w) ASSISTANT PROFESSOR INGLES

195N. PERSONNEL WORK IN SCHOOLS OF NURSING.—The primary purpose of this course is to help head nurses and supervisors to develop greater understanding of the principles of human behavior and greater ability to apply these principles in working with patients and others on hospital divisions, and in establishing cooperative relationships with other departments of the hospital. 3 s.h. (w) ASSISTANT PROFESSOR SMITH

#### DEPARTMENTAL MAJOR

A major in the Department of Education consists of 24 semester hours of work above the freshman year, not including any work listed as primarily for freshmen, and including at least 6 semester hours of courses limited to seniors or to seniors and graduates. Before graduation, majors in the Department must have credit for at least one course in educational psychology, and one course in history and philosophy of education, or in educational sociology. The remainder of their work may be elected from courses listed for sophomores, juniors, and seniors, provided at least 6 semester hours of the course work are taken from courses listed for seniors and graduates, and provided that not more than 6 semester hours may be of courses numbered below 100.

#### MATERIALS AND METHODS COURSES

Certain courses concerned with materials and methods in teaching the various subjects in the public school curriculum are listed in the proper subject matter department. These courses are intended to give credit on teaching certificates and are recommended by the Department of Education for such credit.

## ENGLISH

PROFESSOR IRVING, CHAIRMAN; ASSOCIATE PROFESSOR BEVINGTON. DIRECTOR OF UNDERGRADUATE STUDIES; ASSOCIATE PROFESSOR BOWMAN, SUPERVISOR OF FRESHMAN INSTRUCTION; PROFESSORS BAUM, BOYCE, BRINKLEY, GILBERT, GOHDES, HUBBELL, AND LEARY; VISITING PROFESSOR FOERSTER; ASSOCIATE PROFESSORS BLACKBURN, MITCHELL, PATTON, SANDERS, AND WARD; ASSISTANT PROFESSORS BEVINGTON, HARWELL, JORDAN, POTEAT, REARDON, SCHWIRMAN, SUGDEN, WETHERBY, WHITE, AND WILLIAMS; DRS. CHURCH, AND STONE; MESSRS. COOK, FRIEND, GUILDS, HUNTING, KNOX, MACINTOSH, MICHALAK, REECE, REES, SAWIN, AND WAGNER; MRS. HARDY

**L. ENGLISH FUNDAMENTALS.**—All freshmen whose scores on the placement tests indicate that they are not ready for English 1 must take this course. Students who fail in English 1 must repeat the course. Students who have earned credit in English 1 must also take English 1 and 2. 3 s.h. (w)

ASSISTANT PROFESSOR JORDAN; MESSRS. MACINTOSH, REES, AND WAGNER

**1-2. ENGLISH COMPOSITION.**—All freshmen are required to take course 1 and course 2. (For exemptions, see Uniform Course Requirements, p. 83.)

Students who fail in English 1 or 2 must repeat the course in the following semester. Students in courses 1 and 2 who fail to make an average of "C" or better are strongly advised to earn credit for an additional course in English composition. 6 s.h. (E & W)

ASSOCIATE PROFESSORS BEVINGTON, BOWMAN, PATTON, AND SANDERS; ASSISTANT PROFESSORS BEVINGTON, HARWELL, JORDAN, POTEAT, SUGDEN, WHITE, AND WILLIAMS; DRS. CHURCH, AND STONE; MESSRS. COOK, FRIEND, GUILDS, HUNTING, KNOX, MACINTOSH, REECE, REES, SAWIN, AND WAGNER

**33. WRITING LABORATORY.**—A non-credit course in elementary composition which may be elected by students who need it, or may be required of certain students under the conditions stated on page 74, "Deficiencies in Composition." Students may enter or leave this course at any time, at the instructor's discretion. (w)

ASSISTANT PROFESSORS HARWELL AND JORDAN

**53. ENGLISH COMPOSITION.**—A course in advanced composition and grammar. Emphasis is placed first on the student's mastering the fundamental principles of English grammar and the other essentials of correct writing. Weekly themes are required. 3 s.h. (w)

ASSISTANT PROFESSOR JORDAN

**65-66. ENGLISH COMPOSITION.**—A foundation course in imaginative writing, both prose and verse. Open to sophomores and in special cases to freshmen. The consent of the instructor is required. 6 s.h. (E)

ASSOCIATE PROFESSOR SANDERS

**E93. ADVANCED COMPOSITION FOR ENGINEERS.**—Designed for achieving effectiveness in written reports, descriptions, technical investigations, etc. Open to sophomores and juniors. 3 s.h. (w)

ASSISTANT PROFESSOR HARWELL

**101-102. EXPOSITORY ENGLISH COMPOSITION.**—The course attempts to encourage fluency and accuracy in expository expression. Primarily for juniors and seniors; open also to sophomores approved by the instructor. 6 s.h. (E & W)

ASSOCIATE PROFESSOR MITCHELL

**103-104. ENGLISH COMPOSITION.**—A course in descriptive and narrative writing. Class discussion of students' manuscripts, supplemented by a critical evaluation of a few selected short stories and by individual conferences with the instructor. Open to sophomores, juniors, and seniors. The consent of the instructor is required. 6 s.h. (E)

ASSOCIATE PROFESSOR BLACKBURN

**107-108. JOURNALISM.**—The first semester is devoted to news-writing and copy-reading; the second semester to the writing of feature articles and editorials. 6 s.h. (w)

ASSISTANT PROFESSOR SUGDEN

**133. VERSE-WRITING.**—The writing and criticism of original verse. Limited to not more than eight students, who must apply in writing to the instructor and



submit original verse. Open to seniors, juniors, and exceptional sophomores and freshmen. Once a week throughout the year. 3 s.h. (E)  
[Not offered in 1951-52]

### SPEECH AND DRAMA

106. **PLAYWRITING.**—A study and analysis of the technique of the one-act play. Dramatic writing by the students is discussed in class, with emphasis on the development of individual style. Primarily for juniors and seniors; open also to sophomores approved by the instructor. 6 s.h. (E) ASSISTANT PROFESSOR REARDON

118. **PERSUASIVE SPEAKING.**—The psychological and sociological techniques used in gaining acceptance of ideas through speech. Study is made of the factors influencing human behavior; audience analysis and motivation; choice, arrangement, and adaptation of material. Extensive practice in persuasive speaking. Prerequisite: English 151 or consent of the instructor. 3 s.h. (W) ASSISTANT PROFESSOR WETHERBY

119. **HISTORY OF THE THEATRE.**—The origin and development of drama, acting, and stagecraft from ancient Greece to the modern European and American theatre. Production problems of representative plays of the various periods will be discussed. Primarily for juniors and seniors; open also to sophomores approved by the instructor. First semester only. 3 s.h. (E) ASSISTANT PROFESSOR REARDON

121-122. **PLAY PRODUCTION.**—An introduction to the methods of producing a play. The work of the first semester includes theatre organization, play selection, casting, and rehearsal; that of the second semester, scene design and execution, lighting, make-up, and costume. There will be laboratory work in both semesters. Primarily for juniors and seniors; open also to sophomores approved by the instructor. 6 s.h. (E) ASSISTANT PROFESSOR REARDON AND MR. MICHALAK

139. **THE SPEAKING VOICE.**—The correction of minor functional speech disorders. The speech organs and their function. The International Phonetic Alphabet and its use. Drill in pronunciation, diction, vocal quality. Primarily for sophomores, juniors, and seniors; also open to freshmen with the consent of the instructor. 3 s.h. (W) ASSISTANT PROFESSORS SCHWERTMAN AND WETHERBY

150. **ORAL INTERPRETATION OF LITERATURE.**—A study of the methods by which the creative literary artist attains the aesthetic objectives of unity, harmony, balance, proportion, variety, contrast, and rhythm; with practice in the technique by which these effects can be communicated to an audience. 3 s.h. (E) ASSISTANT PROFESSOR SCHWERTMAN

151. **ESSENTIALS OF PUBLIC SPEAKING.**—A basic course in public speaking, designed to give the student the poise and confidence necessary to think and speak freely before an audience. Particular attention is paid to the gathering and organization of speech materials and to oral presentation. 3 s.h. (E & W)

ASSISTANT PROFESSORS REARDON, SCHWERTMAN, AND WETHERBY;  
MR. MICHALAK; MRS. HARDY

152. **ARGUMENTATION.**—The principles of argumentation and debating. The techniques of analysis, investigation, evidence, reasoning, brief making, and refutation. Participation in class discussions and debates. Prerequisite: English 151 or consent of the instructor. 3 s.h. (W) ASSISTANT PROFESSOR WETHERBY  
[Offered in the fall semester]

171-172. **RADIO BROADCASTING.**—The theory and practice of radio broadcasting. The purpose, preparation, and production of various types of radio programs. There will be experience before a microphone in a studio situation. Laboratory work both semesters. Primarily for juniors and seniors; open also to sophomores approved by the instructor. 6 s.h. ASSISTANT PROFESSOR WETHERBY

### ENGLISH AND AMERICAN LITERATURE AND LANGUAGE

55-56. **REPRESENTATIVE WRITERS.**—The following works are studied in the first semester: Chaucer's Prologue to *The Canterbury Tales* and at least two tales, Malory's *Morte Darthur*, Shakespeare's *1 Henry IV* and *King Lear* and two other plays, Milton's *Paradise Lost* (selections) and some of the shorter poems,



Pepys's *Diary*; in the second semester: Swift's *Gulliver's Travels*, Fielding's *Tom Jones*, Boswell's *Life of Johnson*, Keats's *Poems and Letters*, Arnold's *Essays* (selected), Thackeray's *Vanity Fair*, Shaw's *Saint Joan* and *Major Barbara*. Lectures, recitations, short papers, and frequent tests. 6 s.h. (E & W)

PROFESSOR BOYCE; ASSOCIATE PROFESSORS BEVINGTON, BLACKBURN, BOWMAN, PATTON, SANDERS, AND WARD; ASSISTANT PROFESSORS BEVINGTON, POTEAT, AND SUGDEN; DRs. CHURCH AND STONE; MESSRS HUNTING AND REES

111-112. EIGHTEENTH-CENTURY LITERATURE.—A study of the leading English poets, essayists, dramatists, and novelists from Swift to Blake, with the literary and social background. The major writers studied in the first term are Pope, Swift, Fielding, and Thomson; in the second term, Johnson, Goldsmith, Cowper, and Blake. Tests, discussions, and reports on outside reading. 6 s.h. (E)

PROFESSOR BOYCE

117. MILTON.—Milton's poetry and prose, together with their relation to the period and to other great works of literature. Lectures, discussion, occasional tests, one or two papers. 3 s.h. (E)

PROFESSOR BRINKLEY

123-124. SHAKESPEARE.—In the first semester twelve plays, before 1600; in the second semester ten plays, after 1600. Occasional tests and one or two papers. 6 s.h. (E & W)

ASSOCIATE PROFESSORS BOWMAN AND WARD;  
ASSISTANT PROFESSOR WILLIAMS

125-126. ENGLISH LITERATURE, 1789-1832.—The course begins with selections from the poetry of the forerunners of Romanticism. The chief emphasis in the first semester is on the work of the older Romantics: Wordsworth, Coleridge, Southey, Scott, and Lamb. In the second semester the chief emphasis is on the work of the younger Romantics: Byron, Shelley, Keats, Leigh Hunt, Hazlitt, and DeQuincey. Informal lectures and class discussion of assigned texts. A limited amount of outside reading is required and also some memory work. There are four tests each semester. 6 s.h. (E & W)

ASSOCIATE PROFESSOR PATTON AND ASSISTANT PROFESSOR WHITE

129-130. ENGLISH NOVEL.—The work of the first semester covers the history of the novel through Scott; that of the second semester, from Dickens through Hardy. Lectures and book reports. 6 s.h. (E)

ASSOCIATE PROFESSOR MITCHELL

131-132. ENGLISH LITERATURE, 1832-1900.—A study of the chief English writers of poetry, prose, and drama from Carlyle to Yeats. The major writers studied in the first semester are Carlyle, Tennyson, Browning, Macaulay, Mill, Newman, and Arnold; in the second semester, Ruskin, the Rossettis, Morris, Swinburne, Shaw, and Yeats, with selections from minor writers. Collateral reading from novels of the period. Lectures, discussions, tests, and a term paper. 6 s.h. (E & W)

ASSOCIATE PROFESSORS BEVINGTON AND SANDERS

134. CONTEMPORARY POETRY.—A reading course in the poetry of the twentieth century in England, Ireland, and America, beginning with Gerard Manley Hopkins and William Butler Yeats. An anthology of modern poetry is read and discussed, supplemented by the wider reading of individual poets. Informal lectures and discussions with a critical paper for the term. Open to juniors and seniors, and occasionally to sophomores by special permission. 3 s.h. (E)

ASSISTANT PROFESSOR BEVINGTON

137-138. AMERICAN LITERATURE.—A survey of American literature from Colonial times to the present. Selections from the works of important authors are read, from Cotton Mather to Eugene O'Neill, and complete novels by Hawthorne, Melville, James, Howells, and others. The work of the first semester ends with the Civil War period. Lectures, monthly tests, and a term paper each semester. 6 s.h. (E & W)

PROFESSORS HUBBELL, GOHDES, AND LEARY

142. MATERIALS AND METHODS OF TEACHING HIGH-SCHOOL ENGLISH.—This course is planned to meet the requirements of the several state departments of education and the regional educational governing bodies, and serves as part of the student's general work in practice teaching. It is required in each of the states certifying college graduates who wish to teach high-school English. 3 s.h. (E)

ASSISTANT PROFESSOR JORDAN

143-144. ENGLISH LITERATURE: ELIZABETHAN AND SEVENTEENTH CENTURY.—In the first semester: several Elizabethan plays, with emphasis on Marlowe; selections from the prose writers; selections from the poets, with emphasis on Spenser and Shakespeare. In the second semester: several Jacobean plays; selections from the prose writers, such as Bacon, Browne, and Milton; selections from the poetry of Jonson and Donne and their followers; Milton's early poems, *Paradise Lost*, and *Samson Agonistes*. Lectures, tests, and a term paper each semester. 6 s.h. (E) ASSOCIATE PROFESSOR BLACKBURN

153-154. COMPARATIVE LITERATURE.—Important works in European literature are read in translation and related to similar documents in English literature. In the first semester are read: nine Greek tragedies, five of Plato's *Dialogues*, Vergil's *Aeneid*, and Dante's *Divine Comedy*; in the second semester, Machiavelli, Cervantes, Molière, Voltaire's *Candide*, Goethe's *Faust*, Dostoevski's *The Brothers Karamazov*, Ibsen's plays. Discussions, tests, reports. 6 s.h. (E) PROFESSOR IRVING

155. MODERN EUROPEAN DRAMA.—The emphasis is on Ibsen, Strindberg, and Chekhov, and on the Free Theatre movements. Some quite recent plays will also be studied. 3 s.h. (E) ASSISTANT PROFESSOR WHITE

156. MODERN BRITISH AND AMERICAN DRAMA.—Types of drama are studied in relation to European origins and to the contemporary scene. The students subscribe to *Theatre Arts*. 3 s.h. (E) ASSISTANT PROFESSOR WHITE

158. CONTEMPORARY FICTION.—Wide reading in twentieth-century novels, with special attention to innovations in form and technique. Lectures, discussions, and weekly critical reports. 3 s.h. (w) PROFESSOR LEARY

160. ENGLISH LITERARY BIOGRAPHY.—A reading course in great biographies. Studied are works by Plutarch, Walton, Johnson, Southey, Lockhart, Henry Adams, and Strachey. Lectures, discussions, reports, tests. 3 s.h. (w) ASSOCIATE PROFESSOR SANDERS

161-162. MODERN ENGLISH AND ITS BACKGROUNDS.—An elementary descriptive and historical study of the English language: its sounds, its words (forms and meanings), and its syntax. Some attention is given to the methods of linguistic inquiry and to the relations of philology to literary studies. The first semester is devoted chiefly to a description of modern English, the second to an historical survey of the earlier periods. Lectures, discussions, and short reports. 6 s.h. MR. COOK

163. AMERICAN FICTION.—A survey of fiction in America from its beginnings to 1870, with emphasis on the development of the short story. Lectures, discussions, and frequent written reports. 3 s.h. (w) PROFESSOR LEARY

166. AMERICAN FICTION.—A survey of fiction in America from 1870 to the present, with emphasis on the local color movement and the rise of realism. Lectures, discussions, and frequent written reports. 3 s.h. (w) PROFESSOR LEARY

FOR SENIORS AND GRADUATES

201-202. ANGLO-SAXON.—In the first semester, an introduction to the language, with the reading of prose and of some of the shorter poems; in the second semester, the *Beowulf*. 6 s.h. (w) PROFESSOR BAUM

203-204. CHAUCER.—Reading and interpretation of the text: in the first semester the principal *Canterbury Tales*; in the second, the *Troilus* and the minor poems. A reading report and a term paper. 6 s.h. (w) PROFESSOR BAUM

205-206. MIDDLE ENGLISH.—Close study of selected texts, with attention to the development of the language and to the history of the literature from 1200 to 1400. A term paper each semester. 6 s.h. (w) PROFESSOR BAUM  
[Not offered in 1951-52]

215-216. ELIZABETHAN DRAMA.—Careful study of one major dramatist (Jonson or Beaumont and Fletcher) and extensive reading in the other writers (Heywood, Ford, Massinger, Marlowe, Middleton) with emphasis on the nature and qualities of their work in its historical background. Exposition of plays, reports, and a term paper each semester. 6 s.h. (w) PROFESSOR GILBERT

217. MILTON.—Milton's poetry and prose, with emphasis on the major poems.  
3 s.h. (w) PROFESSOR GILBERT  
[Offered in the second semester]

218. SPENSER.—The reading of Spenser's works, with chief attention to *The Faerie Queene*. 3 s.h. (w) PROFESSOR GILBERT  
[Not offered in 1951-52]

219-220. THE EIGHTEENTH CENTURY.—Swift, Pope, Defoe, Addison, Steele, and others are studied in the first semester; in the second, Gray, Johnson, Boswell, Goldsmith, the letter writers, and the early Romantic poets. Lectures, oral reports, and a term paper each semester. 6 s.h. (E) PROFESSOR IRVING

221-222. ENGLISH LITERATURE OF THE EARLY NINETEENTH CENTURY.—A survey of the principal writers and literary monuments from 1798 to 1830; in the first semester chiefly Wordsworth, Coleridge, and Lamb; in the second, Shelley, Byron, Keats, and Hazlitt. Occasional lectures, frequent classroom discussions of reading assignments, written and oral reports, and a term paper each semester. 6 s.h. (w) VISITING PROFESSOR FOERSTER

223-224. ENGLISH LITERATURE OF THE LATER NINETEENTH CENTURY.—Some of the most important works of the period are discussed in class; the background is filled in by lectures and assigned reading. The first semester is devoted chiefly to Carlyle, Dickens, Thackeray, Tennyson, and Browning; the second semester to Arnold, Ruskin, Pater, George Eliot, Meredith, the Pre-Raphaelites, and Swinburne. A term paper each semester. 6 s.h. (w)  
[Not offered in 1951-52] PROFESSOR BAUM

227. LITERARY CRITICISM.—A study of the Greek and Roman critics, in chronological order but with emphasis on their permanent value rather than on the mere history; also the Continental and English critics to about 1700. Lectures, reports, and a term paper. 3 s.h. (w) PROFESSOR GILBERT

229-230. AMERICAN LITERATURE, 1800-1870.—The writers emphasized in the first semester are Emerson, Thoreau, and Hawthorne; in the second semester, Poe and Melville. In the first semester some attention is given also to Edwards, Franklin, Bryant, Longfellow, Holmes, Whittier, Lowell, and Parkman; and in the second semester, to Byrd, Jefferson, Freneau, Brown, Irving, Cooper, Kennedy, Simms, Timrod, and Lincoln. An oral report and a term paper each semester. 6 s.h. (E) PROFESSORS HUBBELL AND LEARY

233-234. AMERICAN LITERATURE SINCE 1870.—Selected works of the chief writers of the period, including Whitman, Lanier, Mark Twain, James, Howells, Emily Dickinson, Crane, Dreiser, and others. The lectures deal with the social background and with the careers of the leading authors. One test and one term paper each semester. 6 s.h. (E) PROFESSOR GOHDES

235. HISTORY OF AMERICAN DRAMA.—The development of the theater and of dramatic literature in America. Emphasis will be placed on the drama as a reflection of the philosophical and social influences which affected American writing in other fields. 3 s.h. (w) PROFESSOR LEARY

237. ENGLISH DRAMA, 1642-1800.—The Heroic Play and the Comedy of Manners of the Restoration period; and the important plays, serious and comic, of the eighteenth century. Lectures, class discussions, and short reports. 3 s.h. (w)  
[Not offered in 1951-52] ASSOCIATE PROFESSOR WARD

239. SHAKESPEARE.—A study of the plays and poems, with attention to sources, earlier criticism, and the work of Shakespeare's contemporaries. 3 s.h. (w) PROFESSOR GILBERT

241. STUDIES IN DRYDEN.—A detailed study of the poet's non-dramatic work. Lectures on the political, religious, and literary background. A term report. 3 s.h. (E) ASSOCIATE PROFESSOR WARD  
[Not offered in 1951-52]

247. LITERATURE IN COLONIAL AMERICA.—A study of what was written and read by American colonials. Roger Williams, Edward Taylor, Jonathan Edwards, William Byrd, Benjamin Franklin, and Francis Hopkinson are among the writers discussed. Lectures, assigned readings, and occasional papers. 3 s.h. (w)  
[Not offered in 1951-52] PROFESSOR LEARY

248. LITERATURE IN AMERICA, 1775-1820.—The development of a national literature. Philip Freneau, Timothy Dwight, Joel Barlow, Joseph Dennie, Charles Brockden Brown, William Dunlap, and James Kirke Paulding are among the writers discussed. Lectures, assigned readings, and occasional papers. 3 s.h. (w)  
[Not offered in 1951-52] PROFESSOR LEARY

251-252. ENGLISH LITERATURE IN THE SEVENTEENTH CENTURY.—A survey course which covers the major works in prose, poetry, and drama from 1600 to the death of Dryden. Lectures, reports, and term papers. 6 s.h. (E)  
ASSOCIATE PROFESSOR WARD

269-270. SOUTHERN LITERATURE.—The principal writers discussed during the first semester are Byrd, Jefferson, Wirt, Kennedy, the Cooke brothers, Legaré, Simms, Timrod, Hayne, Longstreet and other humorists, and the poets of the Civil War. Considerable attention is paid to the historical and cultural background and to Northern and British authors who wrote about the South. An oral report and a term paper are required each semester. 6 s.h. (E) PROFESSOR HUBBELL  
[269 only, the spring semester]

#### DEPARTMENTAL MAJOR

*Prerequisite:* English 1 and 2.

*Major Requirements:* Twenty-four semester hours in English including the following:

1. Six hours in English 55-56.
2. Six hours in one of five designated period courses (143-144, 111-112, 125-126, 131-132, 137-138).
3. Three hours in one of the major authors, Chaucer, Shakespeare, or Milton (203-204, 123, 124, 117).
4. Nine hours, distributed as follows:
  - (a) Three hours of English literature before 1800. Students who have chosen 143-144 or 111-112 for the period course may substitute any three-hour course approved by their adviser.
  - (b) Three hours of English literature after 1800. Students who have chosen 125-126 or 131-132 for the period course may substitute any three-hour course approved by their adviser.
  - (c) Three hours of American literature. Students who have chosen 137-138 for the period course may substitute any three-hour course approved by their adviser.

*Related work:* Eighteen semester hours, which may include appropriate courses in history, aesthetics, art, music, languages, literature in translation, philosophy, or courses in composition, dramatics, and speech. Related work must be taken in at least two departments.

*Electives:* Students may use 12 hours of their free electives for additional work in English and American literature. The maximum credit in such courses may not exceed 36 hours. A total of 54 semester hours' credit in the department is allowed. Students who are looking forward to graduate work should take as many of the period courses as possible. No more than five seniors may be admitted to any course on the 200 level.

#### FORESTRY

Students without a Bachelor's degree who are preparing for work in forestry as a profession should take the courses outlined under the Academic-Forestry Combination (see pages 93-94). However, with the consent of the instructor in charge, certain forestry courses may be elected by student in other curricula pro-



vided they have had adequate preparation (see *Bulletin of the School of Forestry*).

Members of the sophomore, junior, and senior classes, whether or not registered in the Academic-Forestry Combination, may elect the following course:

52. **PRINCIPLES OF FORESTRY.**—An introductory study of the American forestry movement; economic and social value of forests in the national economy; principal forest regions and timber trees in the United States; regeneration, treatment, protection, and management of forests as permanent crops; organization and activities of existing forestry agencies. 2 s.h. (w)

## GEOLOGY

PROFESSOR BERRY, CHAIRMAN, DIRECTOR OF UNDERGRADUATE STUDIES AND SUPERVISOR OF FRESHMAN INSTRUCTION; MESSRS. BUCKNER AND HERON

51. **GENERAL GEOLOGY.**—This course is designed to give a general view of the surface features of the earth, their origin, structure, and materials. Illustrative materials are studied in the laboratory. Excursions are made to neighboring points where the principles of the science are studied in the field. Three one-hour lectures or recitations and one three-hour laboratory. 4 s.h. (E)

MR. HERON AND STAFF

52. **GENERAL GEOLOGY.**—This course is designed to give some knowledge of the chief events of the earth's history. Excursions will be made to suitable neighboring localities. Three one-hour lectures or recitations and one three-hour laboratory. Prerequisite: Geology 51. 4 s.h. (E)

MR. HERON AND STAFF

53. **STRUCTURAL GEOLOGY.**—A study of the structural features of the earth's crust. Three one-hour lectures. Prerequisite: Geology 51, 52. 3 s.h. (E)

MR. HERON

58. **GEOMORPHOLOGY.**—A detailed study of the process at work on the land surface and the topographic forms produced by them under different climatic conditions. This course includes practice in the interpretation of topographic maps. Three one-hour lectures or recitations and one three-hour laboratory. 4 s.h. (E)

PROFESSOR BERRY

101-102. **MINERALOGY.**—This course is devoted to a study of the fundamentals of crystallography and the crystal groups, using crystal models and crystallized minerals. Followed by the systematic study of about 175 important minerals. Determinative work includes exercises on sight recognition, identification by blow-pipe, and other physical and chemical tests. Excursions will be made to neighboring mineral localities. Three two-hour periods. Prerequisite: Chemistry 1-2 (can be taken concurrently). 8 s.h. (E)

PROFESSOR BERRY

151. **ECONOMIC GEOLOGY.**—Study of world distribution, geologic occurrence, and uses of important mineral deposits. Three one-hour lectures or recitations and one three-hour laboratory. Prerequisite: Geology 101-102. 4 s.h. (E)

MR. HERON

152. **INTRODUCTORY PALEONTOLOGY.**—Systematic study of invertebrate paleontology, dealing mainly with generic characters of the fossil invertebrates and their use in identifying and correlating geologic formations. Three one-hour lectures or recitations and one three-hour laboratory. Prerequisites: Geology 51, 52, and Zoology 1. 4 s.h. (E)

PROFESSOR BERRY

164. **INTRODUCTION TO GEOLOGIC MAPPING.**—An introduction to the fundamental principles and techniques used in geologic mapping, including applicable methods of surveying, the use of aerial photographs, the interpretation of geologic maps, and the solution of problems in geologic relationships. Field excursions will be made when possible. Two hours of lecture and three hours of laboratory each week. Prerequisites: Geology 51, 52, 55, 151. 3 s.h. (E)

MR. HERON



## DEPARTMENTAL MAJOR

*Prerequisites:* None for Geology 51. Chemistry 1-2 for Geology 101-102; Zoology 1 for Geology 152.

*Major Requirements:* Geology 51, 52, 55, 101-102, 151, 152, 164. Geology 58 may be elected.

## GERMANIC LANGUAGES AND LITERATURE

PROFESSOR VOLLMER, CHAIRMAN; ASSISTANT PROFESSOR MAXWELL, DIRECTOR OF UNDERGRADUATE STUDIES; ASSOCIATE PROFESSOR WILSON, SUPERVISOR OF FRESHMAN INSTRUCTION; ASSOCIATE PROFESSOR SHEARS; MESSRS. HOFEN AND YATES

*All courses except Elementary and Intermediate German may be taken for one semester only, when circumstances make it advisable.*

1-2. ELEMENTARY GERMAN.—6 s.h. (E & W)

ASSISTANT PROFESSOR MAXWELL AND STAFF

3-4. INTERMEDIATE GERMAN.—6 s.h. (E & W)

ASSOCIATE PROFESSOR WILSON AND STAFF

51-52. INTRODUCTION TO GERMAN LITERATURE.—A third year course. Both literary and linguistic factors are combined with practice in the spoken language. 6 s.h.

PROFESSOR VOLLMER AND STAFF

*For courses in the 100 and 200 group which will be offered in 1951-52, please consult list furnished by Dean's Office before registration.*

107-108. SCIENTIFIC GERMAN.—The German language as used in the various contemporary sciences. 6 s.h.

ASSOCIATE PROFESSOR WILSON; AND ASSISTANT PROFESSOR MAXWELL

109-110. GERMAN PROSE FICTION.—Origin and development of the German novel with special emphasis on the nineteenth century. 6 s.h.

ASSOCIATE PROFESSOR WILSON

111-112. INTRODUCTION TO THE CLASSIC DRAMA.—Selected dramas from Lessing, Goethe, and Schiller. 6 s.h.

ASSOCIATE PROFESSOR WILSON

115-116. GERMAN DRAMA OF THE NINETEENTH CENTURY.—A study of leading dramatists from Kleist to Hauptmann. 6 s.h.

ASSOCIATE PROFESSOR WILSON

117-118. GERMAN CONVERSATION.—A course in writing and speaking German for properly qualified students. 6 s.h.

PROFESSOR VOLLMER; ASSOCIATE PROFESSOR SHEARS;  
AND ASSISTANT PROFESSOR MAXWELL.

119-120. GERMAN LITERATURE IN ENGLISH TRANSLATION.—The great epochs in German literature studied through English translations. 6 s.h.

PROFESSOR VOLLMER

121-122. SCHILLER.—A study of his life and works in relation to the culture of the eighteenth century. 6 s.h.

ASSISTANT PROFESSOR MAXWELL

123-124. MODERN GERMAN SHORT STORY.—Development and technique of the Novelle. 6 s.h.

ASSOCIATE PROFESSOR SHEARS

125-126. CONTEMPORARY GERMAN LITERATURE.—A study of representative works of the twentieth century. 6 s.h.

ASSOCIATE PROFESSOR SHEARS

127-128. SURVEY OF MODERN GERMAN LITERATURE.—Excerpts from novels, poems and short stories illustrating the development of modern German literature are read. 6 s.h.

PROFESSOR VOLLMER

131-132. INTRODUCTION TO GOETHE.—The reading of his early novels and epics and works pertaining to his life. 6 s.h.

ASSISTANT PROFESSOR MAXWELL

201-202. GOETHE.—A study of Goethe's life and works, with special emphasis upon the broader aspects of his ever-widening interests and literary activities. 6 s.h.

203-204. EIGHTEENTH CENTURY.—Eighteenth-century German literature in its relation to contemporary European philosophy. 6 s.h. PROFESSOR VOLLMER

205-206. MIDDLE HIGH GERMAN.—The language and literature of Germany's first classical period. 6 s.h. PROFESSOR VOLLMER

207-208. GERMAN ROMANTICISM.—The course covers the entire field of German romanticism from 1800 to 1850. 6 s.h. PROFESSOR VOLLMER

209-210. KLEIST, GRILLPARZER, AND HEBBEL.—The dramatic development in Germany after Schiller. 6 s.h.

211-212. HEINRICH HEINE AND YOUNG GERMANY.—Heine's life and thought, culminating in the Jungdeutschland Movement. 6 s.h. PROFESSOR VOLLMER

213-214. LITERATURE OF THE EMPIRE, 1871-1914.—A study of the literature of this period with emphasis on a few leading writers. 6 s.h.

ASSOCIATE PROFESSOR SHEARS

### DEPARTMENTAL MAJOR

1. *Prerequisites:* German 1-2 and 3-4.

2. *Major Requirements:* Twenty-four semester hours in the German Department. Twelve of these must be selected from the 200 courses. The remaining twelve may be selected from German 51-52 and any courses in the 100 group except 119-120.

### GOVERNMENT

See courses listed under Political Science.

### GREEK

ASSISTANT PROFESSOR TRUESDALE, DIRECTOR OF UNDERGRADUATE STUDIES; ASSISTANT PROFESSOR ROSE, SUPERVISOR OF FRESHMAN INSTRUCTION; ASSISTANT PROFESSOR WAY

Courses 15, 121-122, 141-142, and 131 are entirely in English and require no knowledge of the Greek language. The purpose in offering them is to give a wider circle of students some conception of the debt which modern civilization owes to the Greeks.

1-2. COURSE FOR BEGINNERS.—Open to all students. 6 s.h. (w)

ASSISTANT PROFESSOR TRUESDALE

53-54. XENOPHON.—*Anabasis*, Books I-IV. Open to students who have completed course 1-2. 6 s.h. (w)

ASSISTANT PROFESSOR ROSE

105-106. HOMER.—*Iliad*, Books I-III. PLATO.—*Apology* and *Crito*. Open to students who have completed courses 1-2 and 53-54 or their equivalents. 6 s.h. (w)

ASSISTANT PROFESSOR TRUESDALE

107-108. EURIPIDES.—*Medea*. SOPHOCLES.—*Oedipus Tyrannus*. ARISTOPHANES.—*Clouds*. Open to students who have completed the required preliminary work. 6 s.h. (w)

STAFF

15. MYTHOLOGY.—A study of Greek mythology and the use made of it in art and English literature. No knowledge of the Greek language is required. Open to freshmen as an elective in either semester. 3 s.h. (w & e)

ASSISTANT PROFESSORS TRUESDALE AND WAY

115-116. SIGHT READING IN GREEK.—Three hours per week through the year. 4 s.h. (w)

ASSISTANT PROFESSOR TRUESDALE

117-118. GREEK PROSE COMPOSITION.—The character of this course is determined by the needs of the students enrolled. 3 s.h. (w)

ASSISTANT PROFESSOR ROSE

121-122. GREEK LITERATURE IN ENGLISH TRANSLATION.—The purpose of this course is to give a general survey of the life and civilization of the Greeks, especially to those who have never studied the language but wish to become

acquainted with some of the choicest portions of the literature by the use of translations. It is, however, open as an elective to all juniors and seniors, whether they know Greek or not. First, the *Iliad* and the *Odyssey* are read in translation and illustrated with stereopticon views of the excavations and discoveries at Troy and other cities of the Aegean age; then, many of the extant plays of the three great tragic poets are studied in English translation. 6 s.h. (w & E)

ASSISTANT PROFESSORS ROSE AND TRUESDALE

*Students may elect course 122, whether they have taken course 121 or not.*

141-142. GREEK ART.—Lantern lectures, designed to provide a comprehensive survey of the development of Greek sculpture and Greek architecture in all periods. The course is opened by a preliminary account of Egyptian, Mesopotamian, and Aegean backgrounds. Open to seniors, juniors, and (by arrangement) sophomores. No knowledge of Greek is required. 6 s.h. (E) ASSISTANT PROFESSOR WAY

*Students may elect course 142, whether they have taken course 141 or not.*

131. HISTORY OF GREECE.—The history of the Greek world from the Late Bronze Age to the Macedonian conquest. Open to seniors, juniors, and (by arrangement) sophomores. No knowledge of Greek is required. 3 s.h. (E)

ASSISTANT PROFESSOR WAY

203-204. HOMER.—*Odyssey*. PINDAR AND BACCHYLIDES. 6 s.h. (w)

ASSISTANT PROFESSOR TRUESDALE

207-208. GREEK ORATORS.—Selected speeches. 6 s.h. (w)

ASSISTANT PROFESSOR WAY

209-210. PLATO.—*Symposium*, *Protagoras*, and parts of the *Republic*. 6 s.h. (w)

ASSISTANT PROFESSOR WAY

*Only one of the three year-courses for seniors and graduates (203-210), listed above, is offered each year.*

243. ATHENIAN TOPOGRAPHY.—The topography and monuments of ancient Athens. 3 s.h. (w)

ASSISTANT PROFESSOR WAY

244. GREEK EPIGRAPHY.—Lectures on the history of the alphabet and the development of the local Greek alphabets, followed by extensive reading of inscriptional texts in facsimile. 3 s.h. (w)

ASSISTANT PROFESSOR WAY

245. GREEK DIALECTS.—A linguistic study of transliterated inscriptions illustrative of the major Greek dialects. The interrelations of the dialectal forms are examined with reference, where possible, to their origin in protoethnic Greek. 3 s.h. (w)

ASSISTANT PROFESSOR WAY

246. GREEK HISTORICAL INSCRIPTIONS.—The more valuable historical inscriptions are read in chronological order and interpreted in their general bearing upon the course of Greek history. 3 s.h. (w)

ASSISTANT PROFESSOR WAY

247-248. GREEK ARCHAEOLOGY.—Advanced course in the general field for seniors and graduates, comprising architecture, sculpture, vases, and the minor arts. 6 s.h. (w)

ASSISTANT PROFESSOR WAY

*Of the courses numbered from 243 to 248 only two semester-courses are offered each year.*

#### DEPARTMENTAL MAJOR

*Prerequisites:* Greek 1-2.

*Major Requirements:* A candidate for a major in Greek must complete 24 semester hours, including the following courses: Greek 53-54, 105-106, 107-108, 117-118, and 131.

Graduates of Duke University may attend the American School of Classical Studies at Athens, Greece, without charge for tuition, and are eligible to compete for the fellowships that are offered annually by the School. These consist of two fellowships in Greek archaeology and one in the language, literature, and history of ancient Greece, each with a stipend of \$2,000. They are awarded mainly on the basis of examinations held in the beginning of February of each year.

## HEALTH AND PHYSICAL EDUCATION

MR. CAMERON, DIRECTOR; PROFESSOR AYCOCK; MESSRS. BLY, BRADLEY, CALDWELL, CHAMBERS, COOMBS, COX, ESICK, FALCONE, GERARD, HAGLER, HARRISON, HEDSTROM, HENDRIN, HENDRICKSON, HILL, KARMAZIN, LEWIS, MONTFORT, MURRAY, PARKER, PERSONS, WADE

## REQUIRED PHYSICAL EDUCATION FOR MEN

A student must complete four semesters of physical education in order to fulfill graduation requirements.

All students are given a medical and physical examination before registration. Students who have physical handicaps must register in Corrective Physical Education. Students assigned to these classes will take work suited to their particular needs and capacities.

Students without defects will register in Physical Education 1 and 2 in their freshman year. The activities are selected from the following: Apparatus, combatives, games (fundamentals of basketball, soccer, volleyball), swimming and tumbling. Swimming is required each semester of freshman year.

After a student has completed Physical Education 1 and 2, he may complete his physical education requirement by electing and satisfactorily completing two courses from the following individual and team sports: 51. Apparatus-Tumbling; 52. Badminton; 53. Basketball-Handball; 54. Boxing-Wrestling; 55. Lacrosse-Soccer; 56. Swimming, advanced; 57. Tennis-Volleyball; 58. Golf.

For information concerning gymnasium uniforms see page 179.

## ELECTIVES IN PHYSICAL EDUCATION

Students in Group VI A may elect 15 semester hours from courses in physical education. Six semester hours may be elected from the courses listed under Special Methods in Physical Education and 9 semester hours may be elected from the courses listed under Theory and Practice in Physical Education.

These courses are arranged to meet the increasing demand for teachers who are qualified to coach and teach physical education. They should be selected with the advice of the Director of Undergraduate Studies in order to meet the needs of the individual.

## SPECIAL METHODS IN PHYSICAL EDUCATION

163. ATHLETIC COACHING IN SECONDARY SCHOOLS.—Theory and practice in the fundamentals of coaching baseball and track. Prerequisites: courses 1 and 2. Open to juniors and seniors. Sophomores by permission only. 3 s.h. (w)  
MR. COOMBS, MR. CHAMBERS

164. ATHLETIC COACHING IN SECONDARY SCHOOLS.—Theory and practice in the fundamentals of coaching football and basketball. Prerequisites: courses 1 and 2. Open to juniors and seniors. Sophomores by permission only. 3 s.h. (w)  
MR. CAMERON AND STAFF

## THEORY AND PRACTICE IN PHYSICAL EDUCATION

65. HISTORY AND PRINCIPLES OF PHYSICAL EDUCATION.—A study of the objectives and principles upon which physical education is based. The history of physical education is studied in order to show the changes in objectives, principles, and methods and as an aid in the interpretation of trends. Open to sophomores, juniors, and seniors. 3 s.h. (w)  
PROFESSOR AYCOCK

172. RECREATIONAL LEADERSHIP.—Combative contests, games, mass athletics, supervision of community recreation. Open to juniors and seniors. Sophomores by permission only. 3 s.h. (w)  
MESSRS. GERARD AND HARRISON

173. INDIVIDUAL GYMNASTICS.—The diagnosis of abnormal cases, including overweight, underweight, post-operative, postural, and flat-foot cases, with the prescription of exercise for their correction. Open to juniors and seniors. Sophomores by permission only. 3 s.h. (w)  
PROFESSOR AYCOCK



182. THE ADMINISTRATION OF HEALTH AND PHYSICAL EDUCATION IN SECONDARY SCHOOLS.—Presents the everyday problems that arise in the experience of the teacher of health and physical education. Open to juniors and seniors. 3 s.h. (w) PROFESSOR AYCOCK, MESSRS. GERARD AND HARRISON

187. SCHOOL PROGRAMS OF PHYSICAL EDUCATION.—Open to juniors and seniors. 3 s.h. (w) MESSRS. GERARD AND HARRISON

190. PROTECTIVE PRACTICES IN PHYSICAL EDUCATION.—A study of safety measures including training and first aid. Open to juniors and seniors. 3 s.h. (w) MESSRS. CHAMBERS AND MONTFORT

#### HEALTH EDUCATION

132. SCHOOL HEALTH PROBLEMS.—A course designed (a) to familiarize the teacher with school health problems such as physical screening, communicable disease prevention and control, healthful school environment; (b) to present methods and materials for health teaching in elementary and secondary schools. 3 s.h. (w) PROFESSOR AYCOCK

#### WOMAN'S COLLEGE

PROFESSOR GROUT, CHAIRMAN; ASSOCIATE PROFESSORS BOOKHOUT AND LEWIS; ASSISTANT PROFESSORS HOLTON AND SWASEY; MISS MCCORMICK, MRS. MATTHIAS, MRS. NEWCOMER, MISS PAYNE, AND MISS UHRHANE

#### REQUIRED PHYSICAL EDUCATION FOR WOMEN

Four semester hours of physical education, to be completed in six semesters, are included in the 124 hours required for graduation.

Every student must take one semester ( $\frac{1}{2}$  s.h.) of each of the following types of activity: individual or dual sport, dancing, and swimming (if she is unable to pass the swimming test). The remaining work necessary to complete the requirement may be elected from the activities listed in this section. All required work should be completed by the end of the junior year.

All students are given a physical and medical examination upon entering and at intervals throughout their college course. Classes in individual physical education and light sports are arranged for those who should not take the more active work.

For information concerning gymnasium costumes see page 179.

#### SPECIAL FRESHMAN PHYSICAL EDUCATION

At the beginning of the freshman year, after a series of tests has been given, individual conferences are held and each student is guided into the type of activity she most needs, as determined from the evaluation of the test scores and the results of the conference. In addition, one lecture hour of orientation, body mechanics, and social hygiene is required during the first semester.

In the Woman's College the three-year requirement is met as follows:

##### FRESHMAN YEAR

PHYSICAL EDUCATION 1, ORIENTATION AND BODY MECHANICS.—First semester.  $\frac{1}{2}$  s.h.

FRESHMAN ACTIVITIES.—First semester.  $\frac{1}{2}$  s.h. Second semester. 1 s.h.

##### SOPHOMORE YEAR

PHYSICAL EDUCATION ACTIVITIES.—1 s.h.

##### JUNIOR YEAR

PHYSICAL EDUCATION ACTIVITIES.—1 s.h.

#### PHYSICAL EDUCATION ACTIVITIES

Dancing: Folk dancing, modern dance, social dancing, square dancing, tap dancing. Individual and dual sports: Archery, badminton, bowling, diving, fencing, golf, life saving, light sports, riding, stunts and tumbling, swimming, tennis.

Team sports: Basketball, hockey, softball, volleyball.

Special developmental activities: Body mechanics, individual physical education, fundamental rhythms, motor skills, posture.



## PHYSICAL EDUCATION THEORY

Students in the High School Teaching Program may receive academic credit for all courses listed below.

Students in the Elementary School Teaching Program may receive academic credit for Physical Education 102, Health Education 41 and 112.

Students in all groups may receive credit for Physical Education 105-106, 108, 114, and Health Education 41, 112, and 62.

101. HISTORY AND PRINCIPLES OF PHYSICAL EDUCATION.—An historical survey of physical education stressing the relation between the types of activity developed and the social and political ideals of different nations and periods. A study of the principles upon which physical education is based. Analysis of successful teaching in physical education. 2 s.h. (E) PROFESSOR GROUT

102. THE TEACHING OF PHYSICAL EDUCATION IN ELEMENTARY SCHOOLS.—A study of methods and materials used in teaching physical education to children; includes discussion on the theory of physical education, and practice in teaching elementary school activities. Required of women students in the elementary school teaching program. 3 s.h. (E) MRS. MATTHIAS

103. GROUP GAMES OF LOW ORGANIZATION.—Childhood rhythms and games of low organization. Required of students preparing for full-time teaching of physical education. 2 s.h. (E) ASSISTANT PROFESSOR SWASEY  
[Offered every other year alternating with P.E. 107.]

105-106. METHODS AND MATERIALS IN RECREATION.—A course intended to familiarize students with recreation activities and methods of organizing groups in these activities. Laboratory work includes practical leadership experience with a recreational club or group in a city organization. General fields covered are: Social Activities, Music Activities, Folk and Square Dancing, Games and Sports, Arts and Crafts, Drama Activities, Nature and Outing Activities. Open to juniors and seniors without prerequisite. A year course meeting five periods per week throughout the year. 6 s.h. (E) ASSISTANT PROFESSOR SWASEY

107. THE TEACHING OF RHYTHMIC ACTIVITIES.—Theory and practice in different types of rhythms and dancing. Stress is laid on those types suitable for school use. 2 s.h. (E) ASSOCIATE PROFESSOR LEWIS  
[Offered every other year alternating with P.E. 103.]

108. PROBLEMS IN COMMUNITY RECREATION.—A study of the historical development of organized recreation; recent trends and theories in recreation; qualifications and preparation for leadership; recreational interest of different age groups; the administration of playgrounds and community centers, including the study of local and state recreation departments. Open to juniors and seniors without prerequisite. 3 s.h. (E) ASSISTANT PROFESSOR SWASEY

114. KINESIOLOGY.—A study of muscle function. Analysis of fundamental movements with emphasis on the development of normal posture and efficient body movement. Required of students taking the 30-hour major in physical education. Prerequisites: Zoology I and 2, and Zoology 53. 3 s.h. (E) (Not open to students who have had P.E. 116.) ASSOCIATE PROFESSOR BOOKHOUT

116. KINESIOLOGY.—A study of muscle function. Analysis of human motion as a basis for therapeutic exercise. Prerequisite: Human Anatomy. 3 s.h. (W) (Not open to students who have had P.E. 114.) ASSOCIATE PROFESSOR BOOKHOUT

118. ORTHOPEDIC AND REMEDIAL PHYSICAL EDUCATION.—A study of conditions requiring special or remedial exercises for different age groups. The teaching of body mechanics to normal groups. Purpose and technique of physical examination and evaluation of results. 2 s.h. (E) ASSOCIATE PROFESSOR BOOKHOUT

119. ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION.—Curriculum building in physical education. A study of facilities including plans and equipment for gymnasias and playgrounds. Administrative problems of the high-school teacher and public school supervisor. Tests and measurements in physical education. 2 s.h. (E) PROFESSOR GROUT

181-182. METHODS AND MATERIALS IN PHYSICAL EDUCATION.—A course in the theory and practice of teaching and officiating in games and sports. Laboratory hours arranged to provide practice on the field and in the gymnasium. 4 s.h. (E) ASSOCIATE PROFESSOR LEWIS AND STAFF

185-186. ADVANCED METHODS AND MATERIALS IN PHYSICAL EDUCATION.—A continuation of 181-182. Required of seniors preparing for full-time teaching in physical education. 4 s.h. (E) ASSOCIATE PROFESSOR LEWIS AND STAFF

#### HEALTH EDUCATION

41. PERSONAL HEALTH PROBLEMS.—This course is designed to present basic health information to the student as an individual and also from the point of view of the student's relation to the social group in which she lives. The emphasis is on the individual as a dynamic, functioning personality, rather than as an anatomical structure. Open as an elective to all students and prerequisite for students preparing to teach physical education. Either semester. 3 s.h. (E) MISS UHRHANE

62. COMMUNITY HEALTH PROBLEMS.—This course includes problems of health in community living, such as environmental health hazards and their control, methods of community attack on specific diseases and disorders, health problems specific to certain groups, and the place and contributions of official and non-official public health agencies. With the assumption that the student is now a participating member of and will be a future leader in the community, an attempt is made to correlate and emphasize the physical, mental, and emotional aspects of health in their relation to rich and effective and more complete social living. Prerequisite: H.E. 41. 3 s.h. (E) MISS UHRHANE

112. SCHOOL HEALTH PROBLEMS.—An introduction to school health problems as they confront the classroom teacher. The course recognizes the child's place as the center of the instructional program, and the center around which the environmental aspects of the school are organized. Specific problems to be studied include: physical inspection of school children, communicable disease control, problems of the school plant in relation to the child's health, safety education, teaching procedures based on modern educational theories, and the physical and mental health status of the teacher as contributory to the effectiveness of the whole program. Required of all students in the elementary school teaching program and of all students preparing to teach physical education in secondary schools. 3 s.h. (E) MISS UHRHANE

#### REQUIREMENTS FOR TEACHING HEALTH AND PHYSICAL EDUCATION IN PUBLIC SCHOOLS

The following requirements have been set up for students in the Teaching Program who wish to qualify as full-time or part-time teachers of Health and Physical Education. These requirements meet the standards of the North Carolina Department of Public Instruction for certification in Health and Physical Education and of most of the other states represented in the student body. Students preparing to teach in any state are advised to check with the department as to specific requirements.

*Prerequisites:* Zoology 1-2, Health Education 41.

Thirty semester hours, including Physical Education 101, 103, 107, 114, 118, 119, 181-182, 185-186, Health Education 112 and Zoology 53, 142.

*Education Requirements:* Consult Department of Education.

Students preparing to teach physical education and health on a part-time basis only are advised to take at least the following program:

*Prerequisite:* Health Education 41.

A minimum of 15 semester hours, including Physical Education 101, 103, 107, 119, 181-182, Health Education 112.

*Education Requirements:* Consult Department of Education.

## HISTORY

PROFESSOR LAPRADE, CHAIRMAN; ASSOCIATE PROFESSOR HAMILTON, DIRECTOR OF UNDERGRADUATE STUDIES; ASSISTANT PROFESSOR FERGUSON, SUPERVISOR OF FRESHMAN INSTRUCTION; PROFESSORS CARROLL, CLYDE, LANNING, MANCHESTER, ROBERT, AND SYDNOR; ASSOCIATE PROFESSORS CURTISS, NELSON, ROPP, AND WOODY; ASSISTANT PROFESSORS ACOMB, PARKER, STEVENS, AND WATSON; DRS. COLTON, GIVAN, AND HOLLEY; MR. KYLE

The undergraduate courses in history are designed to afford (1) an introduction to the study of history by a consideration of the history of the modern world; (2) a more intensive study of general American history; (3) opportunities for more advanced study of phases of American, English, European, Hispanic-American, Russian, and Eastern history which interest the teachers and students.

Course 1-2 or 51-52 or an equivalent is a prerequisite for all other courses; course E 1-2 is the prescribed course for students in the College of Engineering; courses 91 and 92 are prerequisite for courses 109-110, 113-114, 153-154, 203-204, 207-208, 209-210, 215-216, 263-264. Sophomores who took only one semester of course 1-2 in the freshman year may be admitted to courses 91 and 92, 63, or 67-68, provided they made a grade of B or above on the semester taken. Courses offered for seniors and graduates are limited to twenty-five students; juniors may not elect them without special permission from the Department and the Council on Graduate Instruction. Sophomores must obtain permission of the instructor in order to be admitted to courses number above 100; students who are not fully qualified sophomores will not be admitted to these courses.

1-2. HISTORICAL BACKGROUND OF THE WORLD TODAY.—This course is an introduction to the study of modern history with special reference to the issues in the modern world. Topics selected for emphasis are: the contest between liberty and authority in the modern state; changing economic organization and theory—capitalism and the challenges to it; the problems of peace and war among the states; the changing faiths men live and die by. Beginning about 1500 with the rise of the European dynastic states, the story is pursued in the first semester to approximately 1871, and in the second through the two great world wars. The central theme in both semesters is the expansion of the influence of Western Europe throughout the world, with some attention to the rise of the United States as a world power. 6 s.h. (w & e)

Sophomores and juniors are not admitted to this course. One semester of the course may be counted as a general elective but not as fulfilling the minimum uniform requirements or, except as provided above, as a basis of further work in history.

ASSOCIATE PROFESSORS HAMILTON AND ROPP; ASSISTANT PROFESSORS ACOMB, FERGUSON, AND PARKER; DR. COLTON AND MR. KYLE

E. 1-2. THE UNITED STATES IN THE WORLD TODAY.—This course is designed for students in the College of Engineering. Topic treated in the first semester are: the rise of national states in Western Europe and other factors attending the discovery and settlement of the New World; the foundation of American institutions; the establishment of the Federal Republic; the frontier, the westward movement, and contemporary international developments; the Civil War; the growth of industry and its influence on society; the Spanish-American War and the emergence of the United States as a world power. In the second semester the emphasis is on the growing interdependence of the Western nations in the twentieth century; their influence throughout the world; the participation of the United States in the World Wars and the resultant problems of today. 6 s.h. (w)

DR. HOLLEY

51-52. HISTORICAL BACKGROUND OF THE WORLD TODAY.—An introductory course for sophomores, juniors, and seniors dealing with the topics indicated in the description of course 1-2. 6 s.h. (w & e)

ASSOCIATE PROFESSOR CURTISS; ASSISTANT PROFESSOR ACOMB; DR. GIVAN

[Not open to freshmen or to students who have had course 1-2.]

63. NAVAL HISTORY AND ELEMENTARY STRATEGY.—After a review of earlier periods, attention is given to the rise of sea-power and its importance in more recent times and to naval actions, especially in the two World Wars. This course is not open to students who have had N.S.102. 3 s.h. (w)

ASSOCIATE PROFESSOR ROPP

67-68. THE BACKGROUND OF MODERN EUROPEAN CIVILIZATION.—The work in this course deals with salient features of the history of the peoples of Europe and adjacent areas from the period of the earliest written records to the formation of the European States-system (c. 1648). Particular attention is paid to the correlation of economic and social activities with religious, artistic, and intellectual development. While intended primarily for sophomores, the course is open also to qualified juniors and seniors. 6 s.h. (E)

ASSOCIATE PROFESSOR NELSON AND ASSISTANT PROFESSOR FERGUSON

91. THE DEVELOPMENT OF AMERICAN DEMOCRACY TO 1865.—This course is a study of trends vital to an understanding of the United States today. The main theme is the development of American democracy. Problems of foreign policy, the growth of capitalism, political practices, social behavior, and conflicting ideals are considered in relation to this main theme. 3 s.h. (w & E)

ASSISTANT PROFESSORS WATSON AND STEVENS AND DR. HOLLEY

92. THE DEVELOPMENT OF AMERICAN DEMOCRACY, 1865 TO THE PRESENT.—A continuation of History 91 with emphasis upon the emergence of contemporary problems. 3 s.h. (w & E)

ASSISTANT PROFESSORS WATSON AND STEVENS AND DR. HOLLEY

Courses 91 and 92 are intended both to serve as continuation courses in the study of history and to afford the student an opportunity to gain the understanding of the past of the United States essential for intelligent citizenship.

105-106. ENGLISH CONSTITUTIONAL HISTORY.—A history of England with emphasis on constitutional aspects. This course is prescribed for students in the Pre-Legal Group in the junior or senior year. 6 s.h. (w)

ASSOCIATE PROFESSOR HAMILTON

*Students who have had course 123-124 may not receive credit for this course.*

107-108. SOCIAL AND CULTURAL HISTORY OF ENGLAND.—A study of English history from the fourteenth century to the present time in an effort to arrive at a synthesis of social and political events and thus provide a background for the study of English literature. Emphasis is placed on the ages of Chaucer, Shakespeare, and Milton; the eighteenth and early nineteenth centuries; the reign of Victoria and the twentieth century. 6 s.h. (E)

ASSISTANT PROFESSOR FERGUSON

*Sophomores who made an average grade of B or above on course 1-2 may be admitted to this course.*

109-110. CONSTITUTIONAL HISTORY OF THE UNITED STATES, 1760 TO THE PRESENT.—A study of the basic problems in forming the Constitution; of its development through the major crises in the history of the United States; of the effects of changing social, cultural, economic, and political conditions on the Constitution. 6 s.h. (w)

ASSISTANT PROFESSOR STEVENS

113-114. AMERICA IN THE TWENTIETH CENTURY.—A historical survey of political, economic, and social problems of twentieth-century United States. Emphasis is placed on reform movements from the Muckrakers through the New Deal, the emergence of the United States as a world power, and conflicting ideas and ideologies. 6 s.h. (w)

ASSISTANT PROFESSOR WATSON

115-116. THE AGE OF ABSOLUTE MONARCHY AND THE FRENCH REVOLUTION.—The study in the first semester deals primarily with the political and social institutions of Western Europe in the seventeenth and eighteenth centuries, including such topics as the absolute monarchy in theory and practice, the peasants, the nobles, commercial and industrial classes, the Church. The study in the second semester includes the old regime in France, the French Revolution, and Napoleonic institutions in Western Europe. 6 s.h. (E)

ASSISTANT PROFESSOR ACOMB



123-124. ENGLISH HISTORY.—A study in the first semester of the development in England of the institutions and habits of life characteristic of the nation and in the second of the extension of English influence throughout the world in the eighteenth, nineteenth, and twentieth centuries. 6 s.h. (w) PROFESSOR LAPRADE  
*Students who have had course 105-106 may not receive credit for this course.*

125-126. EUROPE IN THE NINETEENTH CENTURY.—The work in the first semester deals with the emergence of the Napoleonic empire from the French Revolution and subsequent events to 1861, including such topics as the organization of Europe against Napoleon, the attempts to settle Europe at Vienna and afterward, the revolutions of 1830 and 1848, and the creation of the kingdom of Italy. Readings are assigned from contemporary writers. The work in the second semester begins with the growing importance of the sciences, with attention to Darwin and Faraday. It includes such topics as the application of thermodynamics and electrodynamics to industry, the spread of the industrial revolution from England to America and the Continent, the intensification of social conflict, the rise of Marxian and Fabian socialism, Prussia and the unification of Germany, the rivalry of the European nations in Asia and Africa. 6 s.h. (w) ASSISTANT PROFESSOR PARKER  
 [Not offered in 1951-52]

127. HISTORY OF LATIN AMERICA THROUGH THE FORMATION OF THE NATIONAL GOVERNMENTS.—3 s.h. (w) PROFESSOR LANNING

128. INTER-AMERICAN AFFAIRS.—This course treats the relations of the Latin-American states with each other and with the United States with the design of explaining the current significance of Latin America. Chief emphasis is placed upon social problems and movements common to all the republics and upon the role of the United States in Latin-American affairs, including such topics as American intervention; contributions of the United States to Latin-American life in such matters as public health; Pan-Americanism; Pan-Hispanism; foreign penetration and ideologies; the cultural and commercial aspects of the Good Neighbor Policy; Latin-American states in the World War. 3 s.h. (w) PROFESSOR LANNING

129-130. EUROPEAN EXPANSION OVERSEAS.—In the first semester attention is given to the age of discovery and exploration, the origin and development of the great European empires overseas, and the influence of this movement on the peoples of Western Europe. The work in the second semester deals with the decline of the mercantile empires of the eighteenth century, the rise of free-trade expansion, and the revival of mercantile imperialism in the late nineteenth and twentieth centuries. 6 s.h. (w) PROFESSOR MANCHESTER  
 [Not offered in 1951-52]

ANCIENT HISTORY.—GREEK 131—LATIN 131-132.—See Departments of Greek, Latin and Roman Studies. These courses do not count toward a major in history. (w)

135-136. EUROPE IN THE TWENTIETH CENTURY.—The work in the first semester deals with the period before 1920, including such topics as international relations at the beginning of the twentieth century, the rise of German naval power, the Triple Alliance and the Triple Entente, the economic interdependence of the world, the Turkish Revolution, the Turco-Italian War and the Balkan wars, the first World War, and its immediate aftermath. In the second semester such topics are treated as the rise of totalitarian states, the disruption of world trade, and the second World War. 6 s.h. (w) PROFESSOR CARROLL

141-142. THE FAR EAST FROM COMMODORE PERRY TO CHIANG KAI-SHEK.—Historical interpretations of the role of Eastern Asia in the recent World War with attention to such topics as Western imperialism in China and Japan in the nineteenth century the rise of Japan as a military and industrial power; the emergence of militant Chinese nationalism; the fusion of the Far Eastern and the European wars into a world conflict; the rise of Chinese communism. 6 s.h. (w) PROFESSOR CLYDE  
 [Not offered in 1951-52]



153-154. **THE HISTORY OF THE SOUTH.**—A study, beginning in the Colonial period, of the development of the Southern part of the United States with particular attention to its distinctive characteristics and institutions and to their influence in shaping Southern attitudes toward major questions of national policy. 6 s.h. (w)  
PROFESSOR SYDNOR

161-162. **RUSSIA FROM IVAN THE TERRIBLE TO STALIN.**—Topics treated include the rise of the Russian state and its relations with Poland and Turkey; the agrarian problem and the rise of industry; the Russian Revolution; the political, agricultural, and industrial policies of the Soviet Union; the role of the U.S.S.R. in World War II and its postwar policies. 6 s.h. (w)  
ASSOCIATE PROFESSOR CURTISS

#### FOR SENIORS AND GRADUATES

203-204. **THE UNITED STATES, 1850-1900.**—The rise of sectionalism, secession, war-time problems of the Union and Confederacy, political and economic adjustments of Reconstruction, the status of the Negro, the New South, problems of capital and labor, the agrarian revolt, political parties and reform, the Spanish-American War. 6 s.h. (w)  
ASSOCIATE PROFESSOR WOODY

207-208. **SOCIAL AND CULTURAL HISTORY OF THE UNITED STATES.**—A study of American life and manners with emphasis on educational and reform movements, religion, and the social effects of a changing economy. 6 s.h. (w)  
PROFESSOR ROBERT

209-210. **AMERICAN CONSTITUTIONAL HISTORY.**—A study of the Colonial foundations of American constitutional attitudes, the constitutional aspects of the American Revolution, the framing and ratification of the Constitution, the statehood process and the extension of democracy, the constitutional implications of sectional conflict, and the Supreme Court in its relation to the problems of an industrial America. Prerequisites: courses 91 and 92. 6 s.h. (w)  
[Not offered in 1951-52]

211. **THE TEACHING OF HISTORY AND THE SOCIAL STUDIES.**—Evaluation of the objectives, content, materials, and methods in the teaching of History and the Social Studies. 3 s.h. (w)  
PROFESSOR MANCHESTER

215-216. **THE FOREIGN POLICY AND DIPLOMACY OF THE UNITED STATES.**—The work in the first semester, covering the period 1775-1877, deals with such topics as the origin and development of basic foreign policies; isolation from Europe; paramount interests in Latin America, including the Monroe Doctrine; international co-operation in the Far East. The work in the second semester, covering the period since 1877, deals with topics such as the rise of the new "manifest destiny"; beginnings of American imperialism in Latin America and the Far East; the failure of traditional neutrality in the first World War; postwar conflicts between isolation and collective security; involvement in the second World War. 3 s.h. (w)  
PROFESSOR CLYDE

217-218. **EUROPE SINCE 1870.**—International relations since the Franco-German War is the chief subject of study in this course; special emphasis is placed upon the underlying economic and political influences. 6 s.h. (w)  
PROFESSOR CARROLL

219-220. **THE HISTORY OF THE EUROPEAN PROLETARIAT.**—This course is concerned chiefly with the origins, expansion, and organization of the industrial working classes of Europe. The following problems are emphasized: the decline of serfdom, the growth of an urban working class and social revolutions in England, France, and Germany prior to the eighteenth century, the results of the Industrial Revolution, and labor movements and theories during the nineteenth and twentieth centuries. 6 s.h. (w)  
PROFESSOR CARROLL

[Not offered in 1951-52]

221-222. **THE AGE OF RENAISSANCE.**—A survey of social and cultural changes in Western Europe from Dante to Erasmus. 6 s.h. (w)  
ASSOCIATE PROFESSOR NELSON AND ASSISTANT PROFESSOR FERGUSON

225-226. **THE AGE OF THE REFORMATION.**—A survey of European civilization from 1500 through the Peace of Westphalia. 6 s.h. (w)

[Not offered in 1951-52]

ASSOCIATE PROFESSOR NELSON

227-228. **THE NAPOLEONIC EMPIRE AND ITS AFTERMATH.**—A study, in the first term, of the conditions favoring the rise of Napoleon, the details of his rise to power, the characteristics of his Empire, its importance for European civilization, its decline and collapse, and the attempt of the conservatives at the Congress of Vienna to restore in part the pre-revolutionary world. The theme in the second term is the gradual disintegration of the settlement of Vienna through the ensuing decades to the unification of Germany in 1871. The emphasis after the collapse of the Napoleonic Empire is on Germany and the influences that made her civilization. 6 s.h. (w)

ASSISTANT PROFESSOR PARKER

230. **THE PORTUGUESE EMPIRE AND THE RISE OF BRAZIL.**—The course deals with Portuguese explorations, the establishment of the Portuguese Empire in the East, the transplanting of Portuguese culture overseas, and the rise of a native Brazilian civilization. 3 s.h. (w)

PROFESSOR MANCHESIER

231-232. **THE HISPANIC COLONIES AND REPUBLICS IN AMERICA.**—The development of the Iberian states as colonizing powers, the conquest of America, the Spanish treatment of the Indian, the contest between Spain and other European nations over America, the independence movement, the struggle for stable government, the rise of liberalism with special emphasis upon Mexico from the Revolution of 1910 to the present, and basic inter-American developments. 6 s.h. (w)

PROFESSOR LANNING

233-234. **THE INSTITUTIONAL, CULTURAL, AND SOCIAL HISTORY OF HISPANIC AMERICA.**—The first semester of this course deals with subject races, the development of mixed breeds, the governmental system, the Church and the Inquisition, and Spanish culture with emphasis upon university subjects. In the second semester the work deals with the political ideas of the wars of independence, revolution and dictatorship, the rise of public education, public health, land reform, and the proletarian movements. 6 s.h. (w)

PROFESSOR LANNING

241-242. **NATIONALISM AND REVOLUTIONARY MOVEMENTS IN THE FAR EAST SINCE 1900.**—The industrialization of Japan and the rise of militaristic and totalitarian trends; modernization, republican, and communist movements in China; nationalism in Southeast Asia; American relations with these developments. 6 s.h. (w)

PROFESSOR CLYDE

[Not offered in 1951-52]

245-246. **WAR IN THE MODERN WORLD.**—This course is concerned with the relations between warfare and modern political, economic, and social conditions. Special attention is given to the development of British and American military methods and to the events of the American Civil War and the two World Wars. The work in the first semester deals with Clausewitz's theories of warfare and the period from the introduction of gunpowder to 1871; in the second semester there is a more detailed analysis of recent land, sea, and air warfare. 6 s.h. (w)

ASSOCIATE PROFESSOR ROPF

261-262. **RUSSIA IN THE TWENTIETH CENTURY.**—A study of the background of the Revolution of 1917 followed by an analysis of the history and policies of the Soviet state. 6 s.h. (w)

ASSOCIATE PROFESSOR CURTISS

263-264. **AMERICAN COLONIAL HISTORY AND THE REVOLUTION, 1606-1783.**—The growth of institutions and economic life in the English colonies and the American Revolution. 6 s.h. (w)

ASSOCIATE PROFESSOR WOODY

#### DEPARTMENTAL MAJOR

*Prerequisites:* The Introductory Course in History (1-2 or 51-52).

*Major Requirements:* Students in the General Group desiring to take a major in history are required to elect 24 semester hours in the Department, including six semester hours in the senior year from courses in the 200 group. Students desiring to take the more advanced courses in American history should elect courses 91 and 92 in the sophomore or junior year.

## LATIN AND ROMAN STUDIES

PROFESSOR ROGERS, CHAIRMAN AND DIRECTOR OF UNDERGRADUATE STUDIES; ASSISTANT  
PROFESSOR ROSE, SUPERVISOR OF FRESHMAN INSTRUCTION;  
MESSRS. DELHOMME AND HIGHFILL

Students who wish by study in English to make acquaintance with Roman antiquity from either a literary or an historical approach are afforded that opportunity through the courses in translated Latin Literature (111-112), and Roman History (131-132).

Work is offered in several branches of Roman Studies: Latin Language and Literature, Roman Art and Archaeology, Roman History, Roman Law. Students who present two entrance units in Latin should take course 3-4; those who present three entrance units should take courses 57 and 63 and follow up with courses 4 and 58 or 66, or both, the second semester; those who enter with four units of Latin should pursue course 51-52.

1-2. COURSE FOR BEGINNERS.—Forms, vocabulary, pronunciation and syntax are emphasized the first semester. They are followed by the reading and translating of Caesar's *Gallie M'ar* the second semester. An effort is made to promote rapid development of ability to read easy Latin with satisfaction. 6 s.h. (E)

THE STAFF

3. CICERO'S ORATIONS.—Four orations including the *Manilian Law* and *Archias* are read, and attention is paid to prose style. Prerequisite: two entrance units of Latin. 3 s.h. (E)

THE STAFF

4. VERGIL'S *AENEID*.—Selections from Books I-VI, to the amount of four books or more, will be read and translated, due attention being paid to prosody. Prerequisite: three entrance units and Latin 57 taken in the semester preceding admission to the course, unless Latin 3 was taken. 3 s.h. (E)

THE STAFF

51. LATIN PROSE.—Selections from prose authors, or Cicero's *De Senectute* and *De Amicitia*, or selected books of Livy's history, with special emphasis on developing competence in reading Latin. 3 s.h. (E)

THE STAFF

52. LATIN POETRY.—Selections from the greatest Latin poets, especially Horace's *Odes*. 3 s.h. (E)

THE STAFF

57. SIGHT READING IN CLASSICAL LATIN.—One period of an hour per week devoted to practice in the reading of Latin of the classical period; designed to train students to read with facility. (See course 4.) No outside preparation is required. 1 s.h. (E)

ASSISTANT PROFESSOR ROSE

58. SIGHT READING IN MEDIAEVAL LATIN.—One period of an hour per week devoted to reading interesting mediaeval prose and poetry. Prerequisite: at least one of the following courses: Latin 3, 4, 51, 52, and 57, or an equivalent. No outside preparation is required. 1 s.h. (E)

ASSISTANT PROFESSOR ROSE

63-66. LATIN PROSE COMPOSITION.—Recommended to students who are pursuing course 3-4, 57, and 51-52, and may at the discretion of the instructor be required of such students. 2 s.h. (F)

ASSISTANT PROFESSOR ROSE

101. TACITUS.—Interesting and historically important selections from the *Annals* or the *Histories* of Tacitus are read, with attention to the literary style and the value of the historical narrative. 3 s.h. (E)

PROFESSOR ROGERS

102. JUVENAL.—Juvenal's literary satire forms the basis of the course. 3 s.h. (E)

PROFESSOR ROGERS

103. CICERO.—Selections from one of the major philosophical works, with attention to Cicero's philosophical thought and literary style. 3 s.h. (E)

PROFESSOR ROGERS OR ASSISTANT PROFESSOR ROSE

104. LUCRETIUS.—A study of Lucretius as a philosophical thinker and as a poetic artist. 3 s.h. (E)

PROFESSOR ROGERS OR ASSISTANT PROFESSOR ROSE

109. MATERIALS AND METHODS.—A study of Latin in the secondary school curriculum for prospective teachers of Latin in high schools. Prerequisite: eighteen approved semester hours of college Latin, including courses 51-52, or equivalent courses. Required of students who plan to teach Latin in state high schools. 3 s.h. (E) ASSISTANT PROFESSOR ROSE

111-112. ROMAN LITERATURE IN ENGLISH TRANSLATION.—Selective readings in Latin Literature in English translation with emphasis on the drama, lyric poetry, and the varied contributions of Cicero to literature in the first term, and upon the epic, the satire, and the novel in the second semester. (No language credit.) 6 s.h. (E) ASSISTANT PROFESSOR ROSE

#### 113-114. ROMAN CIVILIZATION.

#### 115-116. ART AND ARCHITECTURE OF ANCIENT ROME.

131-132. HISTORY OF ROME.—A survey of the history of the Roman State from its beginnings to the death of Justinian; its expansion; development of its constitution and public administration; social, legal, political and economic problems of perennial life and interest; the background and setting of Christianity's rise and growth. (This course carries no language credit. No knowledge of Latin is required for admission.) 6 s.h. (E) PROFESSOR ROGERS

203-204. ROMAN EPIC: ENNIUS, VERGIL, MANILIUS, LUCAN, FLACCUS, STATIUS, SILIUS.—A study of this literary genre, and its development by Roman writers; extensive reading of the Roman epics. Not offered if '205-206' is given. 6 s.h. (E)

205-206. ROMAN DRAMA.—Select comedies of Plautus and Terence; select tragedies of Seneca. Rapid reading course. 6 s.h. (E)

#### 207-208. ROMAN PHILOSOPHY.

#### 209-210. VULGAR LATIN: INTRODUCTION TO ROMANCE PHILOLOGY.

211-212. ROMAN ORATORY.—A reading course in the history and development of Roman oratory, based for the most part on Cicero's *Brutus* and the *Dialogus* of Tacitus. 6 s.h. (E) PROFESSOR ROGERS

#### 215. ROMAN ART AND ARCHAEOLOGY.

#### 216. TOPOGRAPHY AND MONUMENTS OF ANCIENT ROME.

### DEPARTMENTAL MAJOR

*Prerequisites:* Latin 1-2, 3-4, or acceptable equivalents.

*Major Requirements:* Latin 51-52, 65-66, twelve semester hours in courses 101, 104, and in the senior year six semester hours in courses of the 200-group.

Majors are recommended to elect course 131-132, History of Rome. Majors who contemplate graduate work are reminded of the necessity of Greek, German, and French for such study.

### MATHEMATICS

PROFESSOR GERGEN, CHAIRMAN; ASSOCIATE PROFESSOR DRESSSEL, DIRECTOR OF UNDERGRADUATE STUDIES; ASSISTANT PROFESSOR HICKSON, SUPERVISOR OF FRESHMAN INSTRUCTION;

PROFESSORS CARLITZ, ELLIOTT, RANKIN, ROBERTS, AND THOMAS; ASSISTANT

PROFESSOR PATTERSON; DRs. ESTILL AND FULTON; MESSRS. HERBST,

OLSON, SILVA, AND SMYTHE; AND ASSISTANTS

The following program of courses in Mathematics is planned for 1951-52. Fall: 1, 5, 6, 50, 51, 52, 53, 123, 131, 139, 235, 247, 271, 285, 291. Spring: 1, 5, 6, 16, 50, 51, 52, 53, 124, 131, 140, 160, 236, 248, 272, 286, 292.

I. INTERMEDIATE ALGEBRA.—Elementary topics, factoring, fractions, linear equations in one, two, and three unknowns, functions and graphs, exponents and radicals, elements of quadratic equations. Prerequisite: one unit in algebra and one unit in geometry. 3 s.h. (W & E) STAFF



5. COLLEGE ALGEBRA.—Advanced topics in quadratic equations, systems involving quadratics, variation, binomial theorem, progressions, inequalities, theory of equations, determinants, partial fractions, probability. This course and Mathematics 6 may be taken concurrently. Prerequisite: Mathematics 1, or one and one-half units in algebra and one unit in geometry. 3 s.h. (w & E) STAFF

6. PLANE TRIGONOMETRY.—Logarithms, right and oblique triangles, radian measure, graphs of trigonometric functions, inverse trigonometric functions, trigonometric identities and equations. This course and Mathematics 5 may be taken concurrently. Prerequisite: Mathematics 1, or one and one-half units in algebra and one unit in geometry. 3 s.h. (w & E) STAFF

15. SPHERICAL GEOMETRY AND TRIGONOMETRY.—Geometric properties of the sphere, theory and computation for spherical triangles, applications to navigation and astronomy. Prerequisite: Mathematics 5 and 6. 3 s.h. (w) STAFF

16. MATHEMATICS OF INVESTMENT.—Simple and compound interest, annuities certain, amortization, sinking funds, depreciation, evaluation of bonds, life insurance. Prerequisite: Mathematics 5. 3 s.h. (w) STAFF

50. PLANE ANALYTIC GEOMETRY.—Rectangular and polar coordinates, loci, straight lines, conic sections. This course and Mathematics 51 may be taken concurrently. Prerequisite: Mathematics 5 and 6. 3 s.h. (w) STAFF

51. CALCULUS I.—Differentiation of elementary functions, curve tracing, maxima and minima, motion, curvature, indeterminate forms. Prerequisite: must be preceded or accompanied by Mathematics 50. 3 s.h. (w) STAFF

52. CALCULUS II.—Integration of elementary functions, areas, solids of revolution, length of arc, surfaces of revolution, centroids, moments of inertia, pressure. Prerequisite: Mathematics 51. 3 s.h. (w) STAFF

53. CALCULUS III.—Introduction to solid analytic geometry, partial differentiation, multiple integrals, series, introduction to differential equations. Prerequisite: Mathematics 52. 3 s.h. (w) STAFF

123. HIGHER ALGEBRA.—The number system, mathematical induction, inequalities, series, recurring series, continued fractions, recurring continued fractions, summation of series, probability. Prerequisite: Mathematics 52, or permission of the instructor. 3 s.h. (w) ASSISTANT PROFESSOR HICKSON

124. STATISTICS.—Averages, moments, dispersion, skewness, kurtosis, correlation, types of distributions, curve fitting, graduation of data to type curves, sampling theory. Prerequisite: Mathematics 53. 3 s.h. (w) ASSISTANT PROFESSOR HICKSON

125. ELEMENTARY THEORY OF EQUATION.—Permutations, determinants, matrices, linear systems, polynomials and their roots, constructibility, resultants, discriminants, simultaneous equations. Offered in alternate years. Prerequisite: Mathematics 53. 3 s.h. (w) STAFF

[Not offered in 1951-52]

131. ELEMENTARY DIFFERENTIAL EQUATIONS.—Solution of elementary types; formation and integration of equations arising in applications. Prerequisite: Mathematics 52. 3 s.h. (w) STAFF

139-140. ADVANCED CALCULUS.—Multiple integrals, series, Taylor's theorem, partial differentiation, improper integrals, line integrals, Green's theorem, complex numbers. Prerequisite: Mathematics 53. 6 s.h. (w) PROFESSOR ELLIOTT

160. ELEMENTARY SOLID ANALYTIC GEOMETRY.—Planes, straight lines, quadric surfaces. Offered in alternate years. Prerequisite: Mathematics 53. 3 s.h. (w) STAFF

#### FOR SENIORS AND GRADUATES

201. HISTORY OF MATHEMATICS.—Evolution of the number system, arithmetic, geometry, algebra, trigonometry, analytic geometry, calculus, and modern geometry. Brief sketches of mathematicians. Offered in alternate years. Prerequisite: Mathematics 51. 3 s.h. (E) PROFESSOR RANKIN

[Not offered in 1951-52]



204. TEACHING OF MATHEMATICS.—Fundamental processes, methods of study, mathematical literature, content of courses, applications, use of instruments, correlation of different branches, historical development of secondary school mathematics. Offered in alternate years. Prerequisite: must be preceded or accompanied by Mathematics 52. 3 s.h. (E)

PROFESSOR RANKIN

[Not offered in 1951-52]

226. GALOIS THEORY OF EQUATIONS.—Permutation groups, group of an equation, solvability by radicals. Prerequisite: Mathematics 53. 3 s.h. (w)

PROFESSOR THOMAS

227-228. THEORY OF NUMBERS.—Congruences, arithmetic functions, compound moduli, quadratic reciprocity, Gauss sums, quadratic forms, sums of squares. Prerequisite: Mathematics 53. 6 s.h. (w)

PROFESSOR CARLITZ

229-230. ALGEBRAIC NUMBERS.—Ideals, unique factorization, divisors of the discriminant, determination of the class number. Prerequisite: Mathematics 125. 6 s.h. (w)

PROFESSOR CARLITZ

235-236. ABSTRACT ALGEBRA.—Groups, fields, rings, matrices, quadratic and bilinear forms, general Galois theory, hypercomplex systems. Prerequisite: Mathematics 53. 6 s.h. (w)

PROFESSOR CARLITZ

247-248. ARITHMETIC OF POLYNOMIALS.—Field theory, detailed study of finite fields, special polynomials and functions, valuation theory, the zeta function. Prerequisite: Mathematics 235, or consent of the instructor. 6 s.h. (w)

PROFESSOR CARLITZ

250. HIGHER GEOMETRY.—Properties of the triangle, transversals, harmonic properties of figures, poles, polars, inversions. 3 s.h. (w)

PROFESSOR THOMAS

255-256. PROJECTIVE GEOMETRY.—Postulational, synthetic treatment centering around Desargues' theorem and the principle of projectivity. Conics, coordinates, order, continuity, metric properties. Prerequisite: Mathematics 53. 6 s.h. (w)

PROFESSOR THOMAS

258. FINITE DIFFERENCES.—Interpolation formulas, symbolic methods, polynomials of Bernoulli and Euler, numerical differentiation and integration, difference equations. Prerequisite: Mathematics 53. 3 s.h. (w)

PROFESSOR CARLITZ

271-272. INTRODUCTORY TOPOLOGY.—Topological properties of Euclidean spaces, set-theoretic and combinatorial methods. Prerequisite: Mathematics 53. 6 s.h. (w)

PROFESSOR ROBERTS

275. PROBABILITY.—Combinatory analysis, mean values, Bernoulli's theorem, probability integral, applications to statistics. Prerequisite: Mathematics 53. 3 s.h. (w)

ASSOCIATE PROFESSOR DRESSSEL

285. MATHEMATICAL ANALYSIS FOR CHEMISTS AND PHYSICISTS.—Vectors, line and surface integrals, tensors, complex variables, differential and integral equations. Prerequisite: Mathematics 53. 3 s.h. (w)

ASSOCIATE PROFESSOR DRESSSEL

286. MATHEMATICAL ANALYSIS FOR CHEMISTS AND PHYSICISTS.—Wave equation, Fourier series, heat equation, telegraphic equation. Legendre polynomials, Bessel functions, Schrödinger's equation. Prerequisite: Mathematics 53. 3 s.h. (w)

ASSOCIATE PROFESSOR DRESSSEL

291-292. THEORY OF FUNCTIONS.—Limits, implicit functions, power series, double series, Cauchy's theorem and its applications, residues, Riemann surfaces, conformal mapping. Prerequisite: Mathematics 53. 6 s.h. (w)

PROFESSOR THOMAS

#### DEPARTMENTAL MAJOR

The student who is planning to take his major work in mathematics is advised to consult with the Director of Undergraduate Studies of the Department as early as possible in his college work. The specific major and related work requirements are as follows.

For the A.B. degree:

*Prerequisite:* Mathematics 5 and 6.

*Major and Related Work:* 42 semester hours.

*Major Requirements:* Mathematics 50, 51, 52, 53, and 12 semester hours in courses in Mathematics numbered above 100, exclusive of Mathematics 201, 204. The total amount of work which the student may take in Mathematics toward the A.B. degree is limited to 36 semester hours.

*Related Work:* 18-24 semester hours of course work, ordinarily in the following departments: chemistry, economics and business administration, philosophy, physics. This work must be approved by the Department of Mathematics through the Director of Undergraduate Studies of the Department. It may include at most one 6 or 8 semester hour introductory course. The work must be taken in at least two departments.

For the B.S. degree:

*Prerequisite:* Mathematics 5 and 6.

*Major and Related Work:* 48 semester hours.

*Major Requirements:* Mathematics 50, 51, 52, 53, and 12 semester hours in courses in mathematics numbered above 100, exclusive of Mathematics 201, 204. The total amount of work which the student may take in mathematics toward the B.S. degree is limited to 40 semester hours.

*Related Work:* 14-24 semester hours of course work in the natural sciences. This work must be approved by the Department of Mathematics through the Director of Undergraduate Studies of the Department. It may include at most one course primarily open to freshmen. A minimum of 8 semester hours must be in laboratory science. The work must be taken in at least two departments.

## MEDICAL SCIENCE

These courses in medical science have been approved by the Faculty Council as appropriate for the Bachelor's degree.

**103. HUMAN PHYSIOLOGY.**—A course in human physiology in which the functions of all organ systems are covered. Special emphasis is given to the study of neuro-muscular and cardiovascular functions. Lectures, laboratory experiments and demonstrations, and conferences. Limited to sixteen students. Primarily for physical therapy students. Prerequisites: Chemistry 1-2 and Zoology 1-2. 6 s.h.

ASSOCIATE PROFESSOR MCCREA AND STAFF

**109. ANATOMY RELATED TO MOTION.**—A course in human anatomy in which the dissection is restricted to the muscles, bone, and joints, and to the circulatory and nervous systems as they are related to movement. Lectures and laboratory. Prerequisite: Zoology 1-2. 8 s.h.

PROFESSOR MARKEE AND STAFF

## NAVAL SCIENCE

PROFESSOR EARLE, CAPTAIN, U. S. NAVY; ASSOCIATE PROFESSOR VAN ARSDALL, COMMANDER,

U. S. NAVY; ASSOCIATE PROFESSOR HARRELL, LIEUTENANT COMMANDER, U. S. NAVY;

ASSISTANT PROFESSORS BRACKETT, BREWER, AND GUSTAFSON, LIEUTENANTS,

U. S. NAVY; AND ASSISTANT PROFESSOR FEITERS, CAPTAIN,

U. S. MARINE CORPS

Standardized titles and designators for courses are established by the Bureau of Naval Personnel for use at the 52 NROTC institutions. The first digit indicates the year of the course; the second digit indicates whether semester or quarter (0 for semester, 1 for quarter); the third digit indicates the semester or quarter of school year in which offered. Specialized courses for Marine Corps officer candidates are indicated by the letter "M" after the designator, and substitute for the basic course of the same number.

**NS-101. NAVAL ORIENTATION.**—History of sea power; the elements of sea power; applications of sea power in campaigns of the two World Wars; organization for national security in the United States; leadership. 3 s.h. (w)

CAPTAIN EARLE, LIEUTENANT BREWER

NS-102. NAVAL ORIENTATION.—Deck seamanship; rules of the nautical road; naval formations and maneuvers; naval customs, traditional regulations; basic characteristics, capabilities, and limitations of naval vessel types; nomenclature; introduction to carrier air, surface, undersea, and amphibious warfare. 3 s.h. (w)

CAPTAIN EARLE, LIEUTENANT BREWER

NS-201. NAVAL WEAPONS.—Evolution of naval ordnance; types and properties of explosives; principles in design and assembly of guns, ammunition, fuses; automatic weapons; basic designs in torpedoes, mines, anti-submarine devices, rockets; principles in the control of fire of naval weapons against air, surface, and underwater targets; nuclear explosives. 3 s.h. (w)

LIEUTENANT BRACKETT

NS-202. NAVAL WEAPONS.—The elements in the problem of control of naval gun fire, the principles of mechanical and electronic solution of the problems; basic principles, capabilities and limitations of radar, sonar, and guided missiles; shore bombardment. 3 s.h. (w)

LIEUTENANT BRACKETT

NS-301. NAVIGATION.—Magnetic and gyro compass; principles of chart construction; the sailings and dead reckoning; piloting; electronic and radar navigation; relative motion; rules of the nautical road; basic aerology and meteorology; maneuvering in storm areas. 3 s.h. (w)

COMMANDER VAN ARSDALL AND LT. CDR. HARRELL

NS-302. NAVIGATION.—Nautical astronomy including a study of the actual and apparent motion of earth, celestial coordinates, time systems, solutions of the astronomical triangle; solutions of observations for lines of position; use of the sextant; identification of stars and planets; complete day's work in practical navigation. 3 s.h. (w)

COMMANDER VAN ARSDALL AND LT. CDR. HARRELL

NS-302M. HISTORY OF THE ART OF WAR.—The development of tactics and material as shown by decisive battles of history; historical causes and effects of wars; the development of United States military policy; total war; briefs of campaigns of World War II. 3 s.h. (w)

CAPTAIN FETTERS, USMC

NS-401. NAVAL MACHINERY AND DIESEL ENGINES.—Principles of steam engineering as related to naval installations for main propulsion; naval boilers, turbines, and related auxiliary machinery; pumps, distilling plants, and refrigeration. Basic principles of internal combustion engines, applications to propulsion installations for naval vessels, craft, and boats; fuels and lubricants. 3 s.h. (w)

LIEUTENANT GUSTAFSON

NS-401E. NAVAL MACHINERY, SHIP STABILITY.—Applications of engineering practices in marine propulsion plants; principles of ship stability. (Limited to Engineering Majors.) 1 s.h. (w)

COMMANDER VAN ARSDALL

NS-402. SHIP STABILITY, NAVAL JUSTICE, AND LEADERSHIP.—The principles of ship stability and buoyancy in the practice of ship design, and in the practice of damage control. The procedures for, and the responsibility of, an officer in the administration of naval justice. The psychology and techniques of leadership. 3 s.h. (w)

LIEUTENANT GUSTAFSON

NS-401M. UNITED STATES MILITARY HISTORY AND POLICY.—The development of United States military policy, the tactics of United States forces in selected battles, current policy and functions of the armed services. 3 s.h. (w)

CAPTAIN FETTERS, USMC

NS-402M. AMPHIBIOUS WARFARE.—History of amphibious warfare and its development, principles of amphibious techniques, and applications of these principles in selected examples. 3 s.h. (w)

CAPTAIN FETTERS, USMC

#### REQUIREMENTS FOR COMMISSION

*Naval Science:* 24 semester hours.

*University courses:* Completion of course requirements to qualify for the baccalaureate degree, or higher. These courses must include Mathematics 6, and Physics 1, 2 or 51, 52, to be completed by the end of the sophomore year. Physical training must be taken in accordance with University requirements, and each

student must include such instruction in swimming as to qualify him as a first class swimmer.

*Summer training:* Regular NROTC students must participate in three periods of training on board ship or at naval stations. Contract students are required to take one training cruise of three weeks' duration, normally between the junior and senior years.

## PHILOSOPHY

PROFESSOR NEGLEY, CHAIRMAN; ASSOCIATE PROFESSOR McLARTY, DIRECTOR OF UNDERGRADUATE STUDIES; ASSISTANT PROFESSOR WELSH, SUPERVISOR OF FRESHMAN INSTRUCTION; PROFESSORS GILBERT, PATTERSON, AND WIDGERY;  
DR. DUNHAM

Courses on the 100 and 200 levels do not generally have formal prerequisites, but unless the student has a special reason for taking one of these courses, he will be well advised to begin the study of philosophy with a course at the 40 or 90 level.

48. LOGIC.—The general character of logical thinking, with special emphasis on the fundamental principles of valid reasoning. 3 s.h. (E & W)

ASSISTANT PROFESSOR WELSH; DR. DUNHAM

49. ETHICS.—An elementary consideration of some of the important moral problems in the light of philosophical tradition and the science of values. 3 s.h.

PROFESSOR GILBERT AND ASSISTANT PROFESSOR WELSH

91. INTRODUCTION TO PHILOSOPHY.—This course is intended to acquaint the student with the nature of philosophical problems. 3 s.h. (E & W)

PROFESSORS GILBERT AND WIDGERY; ASSISTANT PROFESSOR WELSH; DR. DUNHAM

93. HISTORY OF PHILOSOPHY: ANCIENT AND MEDIAEVAL.—A study of the major philosophers of the period with special reference to the continuity of their thought. 3 s.h. (E)

PROFESSOR PATTERSON

94. HISTORY OF PHILOSOPHY: MODERN.—A study of the major philosophers of the period with special reference to the continuity of their thought. 3 s.h. (E & W)

PROFESSOR WIDGERY; ASSOCIATE PROFESSOR McLARTY

97. POLITICAL AND SOCIAL PHILOSOPHY.—A discussion of the fundamental principles of political government and of social organization, with some reference to social values and methods of political activity at the national and international levels. 3 s.h. (E)

PROFESSOR NEGLEY

98. SOCIAL IDEALS AND UTOPIAS.—Readings of selected Utopias; analysis of the value-structures and political principles of these ideal societies. 3 s.h. (E)

PROFESSOR NEGLEY

99. FUNDAMENTALS OF CHRISTIAN MORALITY: AN INTRODUCTION TO CHRISTIAN ETHICS.—Modes and ideals of life as exemplified in Christian history and expressed in Christian literature. 3 s.h. (E)

ASSOCIATE PROFESSOR McLARTY

103. LOGIC.—Continuation of 48. Application of the principles of logic. The nature of deductive systems. Prerequisite: Philosophy 48. 3 s.h. (E)

DR. DUNHAM

104. SCIENTIFIC METHODOLOGY.—A survey of the techniques and methods used for the attainment of knowledge in mathematics, the sciences, history and philosophy. 3 s.h. (E)

DR. DUNHAM

108. PHILOSOPHICAL IDEAS IN ANCIENT GREEK AND ROMAN CULTURE.—A study of selections from non-philosophical literature and of some other aspects of Greco-Roman culture, with attention to problems requiring philosophical discussion. 3 s.h. (E)

ASSOCIATE PROFESSOR McLARTY



109. INTRODUCTION TO SEMANTIC ANALYSIS.—The origins, nature, and uses of language; defects inherent in language as an instrument of communication; primary and subsidiary meanings; the function of association and imagery. 3 s.h. (E) ASSISTANT PROFESSOR WELSH

116. THE DEVELOPMENT OF PHILOSOPHY IN AMERICA.—A historical and critical survey of the leading philosophical movements from Colonial times to the present. 3 s.h. (E) PROFESSOR NEGLEY

117. THE HISTORY OF ETHICS.—A critical study of the principal ethical theories from Socrates to the present. 3 s.h. (E) ASSISTANT PROFESSOR WELSH

121. THE PHILOSOPHY OF PLATO.—A general introduction, to acquaint the student with what Plato had to say about the problems of thought and life. 3 s.h. (E) ASSOCIATE PROFESSOR McLARTY

199. PHILOSOPHY OF RELIGION.—A critical examination of the facts of religious experience and their bearing upon metaphysics. 3 s.h. (E) PROFESSOR PATTERSON

#### FOR SENIORS AND GRADUATES

201-202. THE PHILOSOPHY OF ART.—Analysis with the aid of examples of general terms used in the discussion of art. References to recent aesthetic theories. 6 s.h. (E) PROFESSOR GILBERT

203. CONTEMPORARY ETHICAL THEORIES.—Reading and discussion of twentieth-century American and British moralists. 3 s.h. (E) PROFESSOR NEGLEY

205. THE PHILOSOPHY OF HISTORY.—An enquiry into the logic and methodology of the knowledge of history and into the metaphysical implications of history. 3 s.h. (w) PROFESSOR WIDGERY

208. POLITICAL PHILOSOPHY.—Analysis of the structure of social organization, with particular reference to the function of legislation in democratic politics. 3 s.h. (E) PROFESSOR NEGLEY

209-210. THE PHILOSOPHY OF RELIGION.—A critical consideration of the empirical data of religion and the constructive development of a modern philosophy of religion. 6 s.h. (w) PROFESSOR WIDGERY

211. HISTORY OF ANCIENT PHILOSOPHY.—Topic for 1951-52: Later Dialogues of Plato. 3 s.h. (E) ASSOCIATE PROFESSOR McLARTY

212. HISTORY OF MODERN PHILOSOPHY.—3 s.h. (E) PROFESSOR PATTERSON  
[Not offered in 1951-52]

213-214. HISTORY OF AESTHETICS.—Theories of art and beauty from Pythagoras to Croce. 6 s.h. (E) PROFESSOR GILBERT

217. THE PHILOSOPHY OF ARISTOTLE.—Prerequisite: course 93 or 211. (E) ASSOCIATE PROFESSOR McLARTY

218. MEDIAEVAL PHILOSOPHY.—A study of the philosophy of the Middle Ages, with special attention to selected texts from the works of leading Christian, Jewish and Arabian philosophers. 3 s.h. (E) PROFESSOR PATTERSON

223. CONTEMPORARY PHILOSOPHY.—3 s.h. (E) PROFESSOR PATTERSON  
[Not offered in 1951-52]

225. LOCKE, BERKELEY, HUME.—3 s.h. (E) ASSISTANT PROFESSOR WELSH

231. PHILOSOPHY OF SCIENCE I.—A historical and critical survey of the basic philosophical ideas underlying the development of modern science. 3 s.h. (E)

236. ORIENTAL PHILOSOPHY I.—Chinese philosophy. 3 s.h. (w) PROFESSOR WIDGERY

238. ORIENTAL PHILOSOPHY II.—Indian philosophy. 3 s.h. (w) PROFESSOR WIDGERY



242. SCIENTIFIC METHODOLOGY.—A survey of the methods used in the various natural and social sciences. 3 s.h. (E)

#### DEPARTMENTAL MAJOR

*Prerequisite:* Philosophy 48, but this course may be taken concurrently with courses that count toward the major.

*Major Requirements:* Twenty-four semester hours in philosophy. The program must include:

3 semester hours in the history of ancient philosophy (Course 93 or 211).

3 semester hours in the history of modern philosophy (Course 94 or 212).

Philosophy 117 (waived for students who take Course 49).

6 semester hours of work in the 200 series.

The prospective major should consult the director of undergraduate studies.

#### PHYSICS

PROFESSOR NIELSEN, CHAIRMAN; PROFESSOR HATLEY, DIRECTOR OF UNDERGRADUATE STUDIES; PROFESSOR CARPENTER, SUPERVISOR OF FRESHMAN INSTRUCTION; PROFESSORS GORDY, NEWSON, NORDHEIM, AND SPONER; VISITING PROFESSOR WANG; ASSOCIATE PROFESSORS GREULING AND SMITH; ASSISTANT PROFESSOR LEWIS; DRS. BROWN AND TRAMBARULO; AND ASSISTANTS

A student wishing to major in physics should arrange to complete the necessary mathematics as soon as possible.

1-2. INTRODUCTORY PHYSICS.—This course traces historically and experimentally the development of the important principles of physics. This course is open to freshmen, sophomores and juniors and meets the general science requirement. Three hours of recitation and one two-hour laboratory each week. 8 s.h. (w & E) PROFESSORS CARPENTER AND HATLEY AND STAFF; AND ASSISTANTS

51-52. GENERAL PHYSICS.—This course treats the basic principles of general physics in a more quantitative manner than Physics 1-2. It is designed for sophomores and juniors, and meets in a thorough way the physics requirement for entrance into the study of either medicine or engineering, and is well suited for the general science student. A limited number of freshmen who present physics for entrance and who are taking the required mathematics concurrently may be admitted by permission of the instructor. This course is not open for credit for students who have completed Physics 1-2. Four lecture-recitations and one three-hour laboratory period each week. Prerequisite: Mathematics 5-6 or equivalent (Mathematics 6 may be taken concurrently). 10 s.h. (w)

PROFESSORS HATLEY AND CARPENTER AND STAFF; AND ASSISTANTS

125. INTERMEDIATE PHYSICS—MECHANICS.—The course covers in a thorough manner the elements of mechanics. Three recitations per week. Prerequisites: Physics 1-2 or 51-52 or equivalent, and a course in differential and integral calculus which may be taken concurrently. 3 s.h. (w) PROFESSOR NIELSEN

126. INTERMEDIATE PHYSICS—ELECTRICITY.—The elements of electricity and magnetism. Three lectures and one three-hour laboratory per week. Prerequisites: Physics 125 or equivalent work approved by the instructor, and differential and integral calculus. Integral calculus may be taken concurrently. 4 s.h. (w) ASSISTANT PROFESSOR LEWIS

175. INTERMEDIATE PHYSICS—OPTICS.—The elements of geometrical and physical optics. Three recitations and one three-hour laboratory per week. Prerequisites: Physics 125 and 126 or equivalent work approved by instructor, and differential and integral calculus. 4 s.h. (w) ASSISTANT PROFESSOR LEWIS

176. INTERMEDIATE PHYSICS—THERMODYNAMICS AND KINETIC THEORY.—The elements of thermodynamics and kinetic theory and elementary statistical mechanics. Three recitations per week. Prerequisites: Physics 125 or equivalent work approved by the instructor, and differential and integral calculus. 3 s.h. (w) PROFESSOR NIELSEN OR PROFESSOR NEWSON

A course in general college physics, Physics 125 and 126 or equivalent validated by examination, and a course in differential and integral calculus are prerequisites to all courses numbered 200 and above.

201-202. **MECHANICS.**—The fundamental principles of statics and the dynamics of particles and rigid bodies. Three recitations each week. 6 s.h. (w)

ASSOCIATE PROFESSOR SMITH

203-204. **ELECTRICITY AND MAGNETISM.**—Fundamentals of electricity and magnetism. Electrostatics and magnetostatics. Direct current circuits and networks—bridges, potentiometers, galvanometers, alternating current circuits and networks. Electromagnetic waves. 6 s.h. (w)

ASSOCIATE PROFESSOR SMITH

205. **SPECTROSCOPY.**—The theory of optical instruments and a discussion of spectroscopic laws and of information obtained by spectroscopic methods. Three lectures and one three-hour laboratory each week. 4 s.h. (w)

PROFESSOR SPONER

213-214. **CONTEMPORARY PHYSICS.**—A course which covers the fundamental concepts and the experimental basis of modern physics. Three lectures each week. 6 s.h. (w)

ASSOCIATE PROFESSOR GREULING

217-218. **ADVANCED PHYSICS LABORATORY.**—Measurements involving the fields of mechanics, electricity, magnetism, heat, sound, optics and modern physics. 2-6 s.h. (w)

THE STAFF

219. **ELECTRON TUBES AND THEIR APPLICATION.**—Fundamentals of electron tubes. Motion of charged particles, space charge, gaseous conduction. Electron tube circuits. Three hours of lecture and one three-hour laboratory per week. 4 s.h. (w)

ASSOCIATE PROFESSOR SMITH

220. **ELECTRONIC CIRCUIT ANALYSIS.**—Linear and non-linear circuit analysis, electric oscillations, operation of filters, Fourier analysis of wave phenomenon, coupling in electrical circuits. 3 s.h. (w)

PROFESSOR GORDY OR ASSOCIATE PROFESSOR SMITH

225-226. **ELEMENTARY INVESTIGATIONS.**—The aim of this course is to provide training in the laboratory and library methods of physical research. Properly qualified students may conduct elementary investigations under the supervision of a member of the staff. 3-6 s.h. (w)

THE STAFF

### DEPARTMENTAL MAJOR

A. For the A. B. degree:

*Prerequisites:* Physics 1-2 or 51-52 or equivalent, and Mathematics 5-6.

*Major Requirements:* Eighteen to 24 semester hours in physics including Physics 125, 126, 175 and 176 or equivalent.

B. For the B.S. degree:

*Prerequisites:* Physics 1-2 or 51-52 or equivalent, Chemistry 1-2 and Mathematics 5-6 or equivalent.

*Major Requirements:* Not less than 24 semester hours in physics including Physics 125, 126, 175 and 176 or equivalent.

### POLITICAL SCIENCE

PROFESSOR RANKIN, CHAIRMAN AND DIRECTOR OF UNDERGRADUATE STUDIES; PROFESSORS

COLE, CONNERY, HALLOWELL, VON BECKERATH, AND WILSON; LECTURER ELLIS;

ASSOCIATE PROFESSOR SIMPSON; ASSISTANT PROFESSORS HANSON, RICHARDS,

AND TRAVIS; DR. CHEEK; MESSRS. SEYLER AND WINTER

21. **PRINCIPLES OF GOVERNMENT.**—An introductory study of the principles and problems of government. Open to freshmen as an elective. 3 s.h. (w & e)

ASSISTANT PROFESSOR TRAVIS

22. **GOVERNMENTAL PROBLEMS IN INTERNATIONAL RELATIONS.**—A study of international politics as seen in current problems of international relations. Open to freshmen as an elective. 3 s.h. (w & e)

ASSISTANT PROFESSOR TRAVIS

61-62. AMERICAN GOVERNMENT AND POLITICS.—A study of the American political system, including the organization and functioning of national, state, and local government in the United States. 6 s.h. (W & E)

PROFESSOR CONNERY; DR. ELLIS; ASSOCIATE PROFESSOR SIMPSON;  
ASSISTANT PROFESSORS RICHARDS, HANSON; DR.  
CHEEK; MR. SEYLER, MR. WINTER

63-64. MODERN CONSTITUTIONAL GOVERNMENT.—Principles and institutions of modern constitutional government, the first semester being devoted to American government, the second to government outside the United States. 6 s.h.

DR. ELLIS

Course 61-62 or 63-64 is ordinarily taken before any advanced course in political science. A student who has not had either of these courses may take an advanced course in the Department with the approval of the instructor giving the advanced course. No student may receive credit for both course 61-62 and course 63-64.

111. SURVEY OF FAR EASTERN POLITICS.—An introductory survey of international politics in Eastern Asia and the Western Pacific; the rise of Japan as a modern state; China's struggle for political unity, independence and national development. 3 s.h.

DR. ELLIS

112. CONTEMPORARY PROBLEMS IN FAR EASTERN POLITICS.—The impact of World War II and its aftermath on political institutions and economic structures in the Pacific area. 3 s.h.

DR. ELLIS

121-122. ELEMENTS OF INTERNATIONAL RELATIONS.—Analysis of the operations of international politics, of the foundations of national power, and of international organization, with emphasis upon attempted solutions of the central problem of international security. 6 s.h.

DR. ELLIS

123. INTRODUCTION TO POLITICAL PHILOSOPHY.—A course devoted to the reading of selected political classics. 3 s.h.

PROFESSOR HALLOWELL

125. AMERICAN POLITICAL PARTIES AND PRACTICAL POLITICS.—A study of the historical development, organization, and methods of political parties in the United States. 3 s.h.

ASSOCIATE PROFESSOR SIMPSON

136. MAJOR EUROPEAN GOVERNMENTS.—A survey of the governments of the major European countries. 3 s.h.

PROFESSORS HALLOWELL AND COLE

141. PUBLIC ADMINISTRATION.—An introduction to the role of administration in the governmental process considering principles of administrative organization, methods of administrative control, personnel and fiscal management. Current problems and developments are emphasized. 3 s.h.

ASSISTANT PROFESSOR RICHARDS

146. LEGISLATION.—A study of the legislative process with attention to procedure, methods, techniques, delegation of discretion, and the use of controls. 3 s.h.

ASSOCIATE PROFESSOR SIMPSON

151. LATIN-AMERICAN POLITICAL INSTITUTIONS.—A study of Latin-American governments during the colonial period. 3 s.h.

ASSISTANT PROFESSOR TRAVIS

152. LATIN-AMERICAN POLITICAL INSTITUTIONS.—A study of Latin-American governments during the national period, particular attention being given to the political institutions of Argentina, Chile, Colombia, Uruguay, Brazil and Mexico. 3 s.h.

ASSISTANT PROFESSOR TRAVIS

161. GOVERNMENT AND PLANNING.—A study of selected aspects of physical and economic planning. Emphasis is placed upon governmental organization and procedures involved in planning, with some reference to British and Russian procedure. 3 s.h.

ASSISTANT PROFESSOR HANSON

164. GOVERNMENT CONTROL OF PUBLIC UTILITIES.—A study of the legal, political and administrative considerations involved in governmental regulation of public utilities—communications, transportation, electric power and related segments of business enterprise. Attention is also given to problems of governmental ownership. 3 s.h.

ASSISTANT PROFESSOR HANSON

174. **POLITICS AND ECONOMICS.**—An analysis of the influence of politically dominant forces and ideologies upon economic policies in societies of principal Western countries since the seventeenth century. 3 s.h.

PROFESSOR VON BECKIRATH

207. **AMERICAN CONSTITUTIONAL LAW AND THEORY.**—A study of leading principles of American government, as developed through judicial interpretation of the Constitution. 3 s.h.

PROFESSORS WILSON AND RANKIN

209. **STATE AND LOCAL GOVERNMENT IN THE UNITED STATES.**—A study of the historical development of state and local governments, their present organization, their relation to each other and to the federal government. 3 s.h.

PROFESSOR RANKIN

211. **POLITICAL INSTITUTIONS OF THE FAR EAST.**—A study of the governmental systems of Japan, Korea, and China from the Chou Dynasty to the present. 3 s.h.

[Not offered in 1951-52]

212. **INTERNATIONAL POLITICS OF THE FAR EAST.**—A study of changing power relationships in the Orient since the arrival of the Europeans. 3 s.h.

[Not offered in 1951-52]

221. **INTERNATIONAL PUBLIC ORGANIZATION.**—A study of the structure and functioning of the United Nations system and of selected organizations outside that system. 3 s.h.

ASSISTANT PROFESSOR TRAVIS

223. **POLITICAL THOUGHT TO THE SEVENTEENTH CENTURY.**—A survey of political thought from the time of Plato to the close of the sixteenth century. 3 s.h.

PROFESSOR WILSON

224. **MODERN POLITICAL THEORY.**—Political theories of the seventeenth and eighteenth centuries, and of the first half of the nineteenth, with a study of their influence upon modern political institutions. 3 s.h.

PROFESSORS WILSON AND HALLOWELL

225. **COMPARATIVE GOVERNMENT.**—A comparative study of modern political institutions with particular attention to European constitutional government and politics. 3 s.h.

PROFESSOR COLE

226. **COMPARATIVE GOVERNMENT.**—A comparative study of modern political institutions with particular attention to European authoritarian and dictatorial government and politics. 3 s.h.

PROFESSOR COLE

227-228. **INTERNATIONAL LAW.**—Elements of international law, particularly as interpreted and applied by the United States. 6 s.h.

PROFESSOR WILSON

229. **RECENT AND CONTEMPORARY POLITICAL THEORY.**—An analytical study of liberalism, socialism, and fascism, with special attention to the political theories of the nineteenth and twentieth centuries. 3 s.h.

PROFESSOR HALLOWELL

230. **AMERICAN POLITICAL INSTITUTIONS.**—A study of the formation and development of institutions of the national government in the United States, with historical and analytical treatment. 3 s.h.

PROFESSOR RANKIN

231. **AMERICAN POLITICAL THEORY.**—An analysis of the main currents in American political thought from colonial beginnings to the present day, with emphasis upon the development of liberalism in America. 3 s.h.

PROFESSOR HALLOWELL

235. **THE COMMONWEALTH (BRITISH).**—An analysis of the political relationships between the members of the Commonwealth and a comparative study of the governments of the Dominions, with particular reference to Canada. 3 s.h.

PROFESSOR COLE

241. **NATIONAL ADMINISTRATION.**—The development of the federal administrative structure, its present organization, working concepts and processes in the United States. 3 s.h.

PROFESSOR CONNERY



242. ADMINISTRATIVE MANAGEMENT.—The role of the executive in administrative planning, organization, direction and supervision with some reference to methods of work simplification and management improvement. 3 s.h.

PROFESSOR CONNERY

244. ADMINISTRATIVE LAW.—The law of the administrative process, including the nature of regulatory authority, the status and liability of public officers, administrative tribunals and judicial review of administrative action. 3 s.h.

[Not offered in 1951-52]

PROFESSOR CONNERY

246. GOVERNMENT ADMINISTRATION AND PUBLIC POLICY.—Through use of the laboratory technique, a consideration of the type of administrative problems that the United States Government encounters in the field of public policy and their possible solution. 3 s.h.

PROFESSOR CONNERY

247. REGULATORY ADMINISTRATION.—A survey of the problems involved in the exercise of administrative discretion, including methods of administrative adjudication, judicial control over administrative action, and extra-legal relations. 3 s.h.

PROFESSOR CONNERY

[Not offered in 1951-52]

252. SPANISH-AMERICAN CONSTITUTIONALISM.—A comparative study of the nature, sources, and use of political authority in the constitutional law of Argentina, Chile, Colombia, and Uruguay. 3 s.h.

271. SOCIOPOLITICS AND CAPITALISM.—Labor and labor policies in Western Europe and the United States in the nineteenth and twentieth centuries; the development of the monopoly power and political power of labor in recent decades. 3 s.h.

PROFESSOR VON BECKERATH

291. MUNICIPAL GOVERNMENT.—A study of problems relating to the structural system and activities of municipalities in the United States. 3 s.h.

PROFESSOR RANKIN

292. MUNICIPAL ADMINISTRATION.—A study of principles and methods of municipal administration in the United States. 3 s.h.

PROFESSOR RANKIN

#### DEPARTMENTAL MAJOR

*Prerequisite:* Political Science 61-62 or 63-64.

*Major Requirements:* Eighteen semester hours of work in the Department above courses 61-62 or 63-64, including at least nine semester hours in Senior-Graduate courses.

#### PSYCHOLOGY

PROFESSOR RODNICK, CHAIRMAN; ASSISTANT PROFESSOR GOFFARD, DIRECTOR OF UNDER-GRADUATE STUDIES; PROFESSORS ADAMS, DAI, KUDER, LUNDHOLM, AND ZENER;

ASSOCIATE PROFESSORS BANHAM AND KOCH; ASSISTANT PROFESSORS

COHEN, GARMEZY, MCILUGH, AND REICHENBERG-HACKETT;

LECTURER, DR. KLOPPER

91-92. GENERAL PSYCHOLOGY.—An introduction to the facts, principles, and problems of normal adult psychology through a study of psychological methods as applied to motivation, emotions, perception, sensation, thinking, memory, learning, individual differences, and personality. 6 s.h. (E & W)

STAFF

Course 91-92 or its equivalent is a prerequisite for all other courses in psychology.

104. COMPARATIVE PSYCHOLOGY.—An examination of the bearing upon general psychological theory, especially in the fields of motivation, learning, and development, of observations and experimental investigations of animal behavior. 3 s.h. (E)

106. ABNORMAL PSYCHOLOGY.—A systematic presentation of the psychology of functional mental disorders with emphasis on its bearing upon general psychological theory. 3 s.h. (E)

PROFESSOR LUNDHOLM



107. **PSYCHOLOGICAL ANALYSIS OF PROMINENT CHARACTERS IN LITERATURE.**—Introducing a method of extracting from literature and from the cultural document at large valid generalizations concerning human nature. This course is designed for students who are interested in reading classical literature. Seniors, in case they should have taken Psychology 203, are not eligible for this course. 3 s.h. (E) PROFESSOR LUNDHOLM

109. **INTRODUCTORY SOCIAL PSYCHOLOGY.**—Psychological bases of human and animal societies; effects of different societies on personality development; pedagogical implications. 3 s.h. (E) ASSISTANT PROFESSOR McHUGH

110. **APPLIED PSYCHOLOGY.**—Applications of psychology to problems of personnel selection, industrial efficiency, advertising and selling, detection and treatment of delinquents and criminals, and other problems of practical interest. 3 s.h. (E) ASSISTANT PROFESSOR McHUGH

111. **ADVANCED GENERAL PSYCHOLOGY.**—A more intensive study of several selected problem areas in the field of general psychology with special emphasis on experimental methods and findings in the areas considered. 3 s.h. (E) ASSISTANT PROFESSOR GOFFARD

115. **PSYCHOLOGY OF PERSONALITY.**—A study of the historical and contemporary methods of investigating personality; critical evaluation of findings in psychology and other sciences as they relate to a theory of personality; survey of systematic approaches to personality and contemporary methods of measuring personality traits. 3 s.h. (E) ASSISTANT PROFESSOR REICHENBERG-HACKETT

116. **PSYCHOLOGY OF ADJUSTMENT.**—An application of the principles and findings of normal and abnormal psychology as these relate to adjustment of the normal individual in our changing society; a brief discussion of current socio-cultural trends significant for individual adjustment and a survey of the principles of mental hygiene. 3 s.h. (E) ASSISTANT PROFESSOR REICHENBERG-HACKETT  
Not given for major credit in Psychology.

Not open to students who have had Education 68.

119. **ELEMENTARY LABORATORY PSYCHOLOGY.**—Laboratory applications of the principles of scientific method to specific problems in psychology with particular emphasis upon the experimental techniques most appropriate for obtaining, analyzing, and presenting relevant data. Laboratory and lecture: open to psychology majors only, except by permission of the instructor. 4 s.h. (E) ASSISTANT PROFESSOR GOFFARD

120. **BASIC STATISTICAL TECHNIQUES IN PSYCHOLOGY.**—The application of the more elementary statistical techniques to the collection, analysis, and interpretation of data in psychological research. Open only to psychology majors except by permission of the instructor. 3 s.h. (E) ASSISTANT PROFESSOR GOFFARD

121. **CHILD PSYCHOLOGY.**—A detailed study of the practical problems of infancy and early childhood, with special emphasis upon learning, emotional development, social adjustment, and modern conceptions and methods of child training and guidance. 3 s.h. (E) ASSISTANT PROFESSOR McHUGH  
Not open to students who have had Education 118.

122. **ADJUSTMENT OF THE PRE-SCHOOL CHILD.**—Study and application of techniques of observing, recording and interpreting the behavior of the pre-school child. 1 hour lecture. 4 hours laboratory. Prerequisites: Psychology 121 or equivalent and permission of the instructor. 3 s.h. (E) ASSISTANT PROFESSOR REICHENBERG-HACKETT

126. **ADOLESCENT PSYCHOLOGY.**—The mental, social and emotional development of adolescence and youth will be studied, special attention given to such topics as interest, motivation, home problems, sex differences, recreation, delinquency, and development for citizenship. Prerequisite: Psychology 121 or Education 8 or 88. 3 s.h. (r) ASSISTANT PROFESSOR McHUGH  
Not open to students who have had Education 118.

130. PRINCIPLES IN THE EVALUATION OF BEHAVIOR PROBLEMS.—An introduction to the problems, principles and methods of clinical psychology as an area of application and of research. This course, at a pre-professional level, does not train or qualify the student for the practice of specific techniques in clinical psychology. Prerequisite: Psychology 106. 3 s.h. (E)

ASSISTANT PROFESSOR GARMEZY

203. DYNAMIC PSYCHOLOGY: CONATION AND OUR CONSCIOUS LIFE.—A systematic presentation of the psychology of adult human achievements, adaptive as well as creative, with emphasis upon the significance for these endeavors of the acts of experiencing. Students who have taken Psychology 107 are not eligible for this course. 3 s.h. (E)

PROFESSOR LUNDHOLM

206. SOCIAL PSYCHOLOGY.—Kinds of membership character; psychology of social movements; propaganda; revolutions; nationalism; war. 3 s.h. (E)

PROFESSOR ADAMS

207. PSYCHOLOGY OF MEMORY, THINKING, AND PERCEIVING.—A study of thinking, remembering, and perceiving with reference to the basic processes involved and their determining conditions, with emphasis upon organization, meaning and motivation. 3 s.h. (E)

PROFESSOR ZENER

212. PHYSIOLOGICAL PSYCHOLOGY.—A study of the physiological factors and processes underlying such basic psychological events as perception, adaptive and symbolic behavior, memory needs and emotions. Presupposes Introductory Zoology and preferably an additional course dealing with the structure and functioning of the nervous system. 3 s.h. (E)

PROFESSOR ZENER

215. DEVELOPMENTAL PSYCHOLOGY.—Hypothetico-deductive method applied to the theory of personality structure and the changes it undergoes in development; learning, conflict, character, intelligence, developmental crises, etc.; evaluation of researches on personality dynamics; lectures, readings, motion picture demonstrations. 3 s.h. (E)

PROFESSOR ADAMS

223. ABNORMAL PSYCHOLOGY.—A systematic presentation of the psychology of functional mental disorders with emphasis on its bearing upon general psychological theory. This course constitutes a slightly more technical survey of the same topic matter as Psychology 106. Seniors who have taken Psychology 106 are not eligible for Psychology 223. 3 s.h. (E)

PROFESSOR LUNDHOLM

228. PSYCHOLOGY OF BELIEF.—3 s.h. (E)

PROFESSOR LUNDHOLM

231-232. INTRODUCTION TO RESEARCH.—Restricted to senior psychology majors with at least a "B" average in psychology who have completed Psychology 119 and Psychology 120. Before registration an outline of the project must be submitted for written approval by a departmental committee and by the staff member to whom it assigns the supervision of the research.

STAFF

236. THEORETICAL PSYCHOLOGY.—This course will be devoted to the analysis of techniques of theory construction in psychology. The discussion of these methodological issues will be co-ordinated with the analysis of concrete formulations in contemporary psychology theory. 3 s.h. (E)

ASSOCIATE PROFESSOR KOCH

266. ADVANCED STATISTICS OF PSYCHOLOGICAL INVESTIGATION.—A study of various more advanced statistical principles and procedures employed in psychological research. The course includes the topics of multiple and partial correlation, analysis of variance as employed in controlled experimentation, measures of correlation other than product-moment correlation, reliability and validity of measures, and fundamental concepts of factor analysis. Prerequisite: Psychology 120 or equivalent. 3 s.h. (E)

PROFESSOR KUDER

#### DEPARTMENTAL MAJOR

*Prerequisite:* Psychology 91-92 or equivalent.

*Major Requirements:* 24 semester hours of work in the department, including Psychology 91-92, Psychology 119 (Elementary Laboratory), and one semester of psychological statistics. Related work must include Zoology 1 and 2 or equivalent in biology, and 6 semester hours of sociology or anthropology.

## RELIGION

PROFESSOR MYERS, CHAIRMAN AND DIRECTOR OF UNDERGRADUATE STUDIES; PROFESSORS CANNON, CLARK, HICKMAN, SPENCE, AND STINESPRING; ASSOCIATE PROFESSOR CRUM; ASSISTANT PROFESSORS BRADLEY, BROWNLEE, ECKARDT, PHILLIPS, AND SPENCE; DR. PERRY AND MR. SALES

The uniform course requirements in Religion may be fulfilled by completing six semester hours in any of the following courses: 1, 2, 51, 52, 91, 101, 103, 104, 114, 130, 132, 181, 182, 183.

1. THE ENGLISH BIBLE.—Survey of the contents of the historical and prophetic books of the Old Testament with particular reference to the literary, historical, and religious values. Required of all students majoring in religion and open to others as an elective in the freshman year. 3 s.h. (E & W)

ASSOCIATE PROFESSOR CRUM; ASSISTANT PROFESSORS BRADLEY, ECKARDT, AND SPENCE; DR. PERRY AND MR. SALES

2. THE ENGLISH BIBLE.—Study of the Psalms, Wisdom Literature, and the literature of the New Testament with special attention given to the literary, historical, and religious values. Required of all students majoring in religion and open to others as an elective in the freshman year. Although Religion 1 is not a prerequisite, it will be an aid to the student to complete 1 before taking 2. 3 s.h. (E & W)

ASSOCIATE PROFESSOR CRUM; ASSISTANT PROFESSORS BRADLEY, ECKARDT, AND SPENCE; DR. PERRY AND MR. SALES

51. THE ENGLISH BIBLE.—A survey of portions of the Old Testament literature in its historical and cultural setting. (For further details, see the description of Religion 1.) For sophomores; juniors may take the course. Not open for credit to students who take Religion 1. 3 s.h. (E & W)

PROFESSOR MYERS; ASSISTANT PROFESSORS BRADLEY, ECKARDT, AND SPENCE; DR. PERRY AND MR. SALES

52. THE ENGLISH BIBLE.—A survey of the later literature of the Old Testament and of the New Testament. (For further details, see the description of Religion 2.) For sophomores; juniors may take this course. Not open for credit to students who take Religion 2. Students will find either Religion 1 or 51 an aid to the work in 52. 3 s.h. (E & W)

PROFESSOR MYERS; ASSISTANT PROFESSORS BRADLEY, ECKARDT, AND SPENCE; DR. PERRY AND MR. SALES

91. FUNDAMENTALS OF CHRISTIAN MORALITY: AN INTRODUCTION TO CHRISTIAN ETHICS.—(Identical with Philosophy 99.) 3 s.h.

ASSOCIATE PROFESSOR McLARTY

101. THE SOCIAL TEACHINGS OF THE PROPHETS AND JESUS.—A study of the social teachings of the Old Testament prophets and of the social ideas of Jesus as they appear in the four gospels. Not open for credit to students who take Religion 103 or 114. Either semester. 3 s.h. (W)

ASSISTANT PROFESSOR PHILLIPS

103. THE PROPHETS OF THE OLD TESTAMENT.—In this course a study is made of the history and nature of prophecy, with particular attention being given to the messages of the outstanding pre-exilic literary prophets. Not open for credit to students who take Religion 101. 3 s.h. (E & W)

PROFESSOR MYERS

104. THE HISTORY AND RELIGION OF THE JEWS TO THE ROMAN PERIOD.—The work in this course is based largely on exilic and post-exilic prophecy, the Wisdom Literature, and the earlier apocalyptic and apocryphal literature. 3 s.h. (W)

PROFESSOR MYERS AND ASSISTANT PROFESSOR ECKARDT

114. THE LIFE AND TEACHINGS OF JESUS.—This course considers the period in which Jesus lived, the record of his life, and the meaning of his teachings as recorded in the Synoptic Gospels. Not open for credit to students who take Religion 101. 3 s.h. (E & W)

PROFESSOR MYERS

130. THE HISTORIC CHURCH AND MODERN SOCIAL ISSUES.—This course analyzes and interprets such social questions as war, conflicting economic and political systems, race, marriage and divorce, using as data the attitudes found in different periods of the institutional church and evaluating these attitudes from the Biblical perspective. Prerequisites: one of the following courses, Religion 1, 2, 51, 52, 101, 103, 104. Not open to students who have had or are taking Religion 132. 3 s.h. (w)

ASSISTANT PROFESSOR ECKARDT

[Old number 102]

132. THE CHRISTIAN AND CONTEMPORARY SOCIAL PROBLEMS.—A study of the relevance which Christianity has to such topics as science, marriage, the state, war, politico-economic ideas and practices, communism, and the race problem. The aim of the course will be to encourage personal evaluation and interpretation, using pertinent Biblical teachings and the views of prominent contemporary writers as a basis for judgment. Prerequisites: one of the following courses, Religion 1, 2, 51, 52, 101, 103, 104. Not open to students who have had or are taking Religion 130. 3 s.h. (w)

ASSISTANT PROFESSOR PHILLIPS

[Old number 167]

163. RELIGIOUS EDUCATION OF CHILDREN.—An analysis of the religious life, interests and capacities of children; including a study of the problems, objectives, methods, and materials involved in teaching religion to children. Directed to the needs of the lay workers in the church. 3 s.h. (E)

ASSISTANT PROFESSOR SPENCE

168. MASTERPIECES OF GREAT RELIGIOUS LITERATURE.—This course is devoted to the religious thought in the literature from the second to the twentieth centuries, with special attention given modern religious poetry. 3 s.h.

PROFESSOR SPENCE

169. CHARACTER PROBLEMS.—The psychology of adolescence and the problems of youth in character building, with attention to the character education agencies in local communities. 3 s.h. (E & W)

ASSOCIATE PROFESSOR CRUM

170. RELIGION AND THE FAMILY.—A study of marriage and American home life with emphasis upon ethical and religious aspects. Not open to students who take Sociology 250. 3 s.h. (E & W)

ASSOCIATE PROFESSOR CRUM

171. INTRODUCTION TO THE PSYCHOLOGY OF RELIGION.—A study of the genesis and growth of religious experience, with special emphasis upon the experiences of youth. 3 s.h.

PROFESSOR HICKMAN

181. THE NATURE AND EARLY DEVELOPMENT OF RELIGION.—Introduction to the early history of religion, the beliefs and practices of the more primitive peoples, and the religious life of the ancient world. Not open for credit to students who take Religion 183. 3 s.h. (w)

PROFESSOR CANNON AND ASSISTANT PROFESSOR ECKARDT

182. LIVING RELIGIONS OF THE WORLD.—A survey of the religious systems of India, China and Japan, followed by a study of Judaism, Mohammedanism, and Christianity, the object being to trace the historical development of each religion. Not open for credit to students who take Religion 183. 3 s.h. (w)

PROFESSOR CANNON AND DR. PERRY

183. THE RELIGIOUS AND SOCIAL CONTRIBUTIONS OF THE WORLD'S GREAT RELIGIONS.—A survey of the world's great religions to discover and appraise their cultural and religious values. Not open for credit to students who take Religion 181 or 182. 3 s.h. (w)

PROFESSOR SPENCE AND ASSISTANT PROFESSOR BRADLEY

192. CHRISTIAN BELIEFS.—An introductory study of the nature, significance and contemporary relevance of some of the important Christian beliefs. Prerequisite: 3 semester hours of Bible. 3 s.h.

ASSISTANT PROFESSOR BRADLEY

193. A STUDY OF MATERIALS SUITABLE FOR PUBLIC SCHOOL COURSES IN RELIGION AND ETHICS, including the English Bible and other religious literature. 3 s.h. (E)

ASSOCIATE PROFESSOR CRUM



201-202. **FIRST HEBREW.**—A study in the forms of the Hebrew language with reading of selected Old Testament narratives. 6 s.h. (w) PROFESSOR STINESPRING

207-208. **SECOND HEBREW.**—Samuel or Kings the first semester and Isaiah the second. 6 s.h. (w) ASSISTANT PROFESSOR BROWNLEE

211-212. **HELLENISTIC GREEK.**—Designed for beginners to enable them to read the Greek New Testament. 6 s.h. (w) PROFESSOR CLARK

265. **RELIGIOUS DRAMA.**—A historical survey of the relation between religion and drama, a study of the uses and underlying principles of religious drama, and a critical examination and interpretation of selected dramatic productions. 3 s.h. (w) PROFESSOR SPENCE

268. **RELIGIOUS DRAMA CONSTRUCTION AND PRODUCTION.**—Project work in the creation and production of religious drama and pageants. Practice in the selection, staging, lighting, and direction of religious plays. Construction of dramatic programs of worship. 3 s.h. (w) PROFESSOR SPENCE

#### DEPARTMENTAL MAJOR

*Prerequisite:* Religion 1-2, or 51-52.

*Major Requirements:* A major in the Department of Religion consists of 18 semester hours of work, exclusive of courses primarily for freshmen, selected with the approval of the instructor under whose supervision the student does his major work. Six of the 18 semester hours must be in courses with biblical content.

#### ROMANCE LANGUAGES

PROFESSOR JORDAN, CHAIRMAN; PROFESSOR WALTON, DIRECTOR OF UNDERGRADUATE STUDIES IN FRENCH; ASSOCIATE PROFESSOR DAVIS, DIRECTOR OF UNDERGRADUATE STUDIES IN SPANISH; ASSISTANT PROFESSOR DOW, SUPERVISOR OF FRESHMAN STUDIES IN FRENCH;

MR. PRATT, SUPERVISOR OF FRESHMAN STUDIES IN SPANISH; PROFESSORS

COWPER AND FREDMORE; ASSOCIATE PROFESSOR CASTELLANO; ASSISTANT

PROFESSORS ARCHIE, DEMOREST, AND FEIN; DRs. LEWIS, LLERENA,

AND STRIPLING; MISS BLUE, MRS. CASTELLANO, MR. CORDLE,

AND MRS. DOW

All courses numbered below 100 are designed for the degree requirements of the general students. They aim to develop a sound reading knowledge along with a reasonable facility in speaking and writing. The courses numbered above 100 provide more intensive instruction in the language, and systematic study of the standard literature in French and Spanish. Prospective teachers will find in course 118 a treatment of current methods in the teaching of French and Spanish.

Students who, by reason of foreign residence, have had special opportunities in French or Spanish must be classified by the Director of Undergraduate Studies.

#### FRENCH

1-2. **ELEMENTARY FRENCH.**—Introduction to pronunciation. Essentials of grammar, emphasis on reading in the second semester. 6 s.h. (w & e)

ASSISTANT PROFESSOR DOW AND STAFF

3-4. **INTERMEDIATE FRENCH.**—Standard literary texts (short story, novel, drama) are used as the basis of intensive drill on the essentials of vocabulary, idiom, and construction. Extensive oral exercises are included in reading objective. Prerequisite: French 1 and 2 or two years of high-school French. 6 s.h. (w & e)

ASSISTANT PROFESSOR DOW AND STAFF

51-52. **INTRODUCTION TO FRENCH LITERATURE.**—Selected texts in modern French literature (fiction and drama) are approached from the literary as well as the linguistic point of view. Throughout the course there is systematic oral practice based on topics within the reading assignments. Prerequisite: French 3 and 4 or equivalent. 6 s.h. (w & e)

PROFESSOR WALTON AND STAFF

55. **INTERMEDIATE CONVERSATION.**—To be taken concurrently with French 51, except by special permission. Enrollment limited to 10 students per section. 1 s.h. (e)

Mrs. Dow



56. INTERMEDIATE CONVERSATION.—Prerequisite: French 55. To be taken concurrently with French 52. 1 s.h. (E) Mrs. Dow

108. THE FRENCH ROMANTIC MOVEMENT.—The Cénacles, Romantic poetry, plays and novels. Lectures; selections from Lamartine, Hugo, Vigny, Musset, Dumas and others. 3 s.h. (E) DR. LEWIS

111-112. FRENCH DRAMA SINCE 1850.—Plays by Augier, Dumas fils, Pailleron, Becque, Brieux, Curel, Rostand, and Lavedan are studied the first semester. Plays by Maeterlinck, De Flers, De Caillavet, Porto-Riche, Romains, Sarment, J. J. Bernard, Lenormand, Pagnol, Claudel, and Giraudoux are studied the second semester. *Causeries* and *précis* in French, written and oral reports. 6 s.h. (E)

ASSISTANT PROFESSOR DOW

123. LIBERAL THINKERS OF THE EIGHTEENTH CENTURY.—Selected works of such authors as Diderot, Montesquieu, Rousseau, and Voltaire will be studied from the point of view of their impact upon the social and political thinking of the day. 3 s.h. (w)

ASSISTANT PROFESSOR ARCHIE

127-128. ADVANCED COMPOSITION AND CONVERSATION.—During the first semester elements of syntax are briefly reviewed, along with constant drill in the conversational idiom. In the second semester, there are exercises in free composition, with intensified treatment of pronunciation and diction. 6 s.h. (E)

MRS. DOW

134. CONTEMPORARY FRENCH LIFE AND THOUGHT.—An introduction to the essential currents in French thought since 1885. Representative literary works are used as a basis for analysis and discussion of the contemporary scene. Prerequisite: French 52 or equivalent. 3 s.h. (w)

DR. DEMOREST

213. FRENCH CLASSICISM.—Its initial phase. Readings from Malherbe, Corneille, Molière, Racine, Pascal, Boileau, La Fontaine, La Rochefoucauld, Madame de Sévigné, La Bruyère, and others. 3 s.h. (E)

PROFESSOR WALTON

214. FRENCH CLASSICISM.—Its final phase. Readings from Fontenelle, Saint-Simon, Abbé Prévost, Marivaux Lesage, Montesquieu, Voltaire, and others. Main emphasis on Voltaire. 3 s.h. (E)

PROFESSOR WALTON

215-216. THE MODERN FRENCH NOVEL.—A survey of the novel form from the seventeenth to the twentieth century, with particular attention to the analysis of fundamental literary tendencies: classicism, rationalism, romanticism and realism. 6 s.h. (E)

PROFESSOR JORDAN

219. OLD FRENCH.—An introduction to the Old French language and literature. The *Chanson de Roland*, *Aucassin et Nicolette*. 3 s.h. (E)

PROFESSOR COWPER

220. OLD FRENCH.—Types of Old French literature. The *lais* of Marie de France, Chrétien de Troyes and the Arthurian Romance, the *Roman d'aventure*, the *Roman le la rose*, and the *Roman de Renard*. Readings and lectures. 3 s.h. (E)

PROFESSOR COWPER

227. FRENCH POETRY SINCE THÉOPHILE GAUTIER.—Readings from the principal figures of the Parnassian and Symbolist movements, including Baudelaire, Leconte de Lisle, Heredia, Verlaine, Rimbaud, Mallarmé, Régnier. 3 s.h. (E)

[Not offered in 1951-52]

PROFESSOR WALTON

232. ROUSSEAU AND THE BEGINNINGS OF ROMANTICISM.—A study of the sources of the French Romantic Movement in the works of J. -J. Rousseau and his successors: Bernardin de Saint-Pierre, Senancour, Chateaubriand and others. 3 s.h. (E)

PROFESSOR COWPER

[Not offered in 1951-52]

238. ANATOLE FRANCE.—Analysis of the principal phases of his work and its relation to the French tradition. Reading of his poetry, *Le Crime de Sylvestre Bonnard*, *Thaïs*, *Le Jardin d'Epicure*, *Les Dieux ont soif*, *Le Lys Rouge*, *L'Île des Pingouins*, parts of *La Vie Littéraire*. Optional individual projects. 3 s.h. (E)

[Not offered in 1951-52]

PROFESSOR WALTON

## SPANISH

1-2. ELEMENTARY SPANISH.—Pronunciation and essentials of grammar; emphasis on oral work with appropriate reading materials. 6 s.h. (W & E)

MR. PRATT AND STAFF

3-4. INTERMEDIATE SPANISH.—Readings of standard literary texts; intensive oral work; stress on vocabulary acquisition, review of verbs, and idiom drill. Prerequisite: Spanish 1-2 or two years of high-school Spanish. 6 s.h. (W & E)

ASSOCIATE PROFESSOR DAVIS AND STAFF

65. INTRODUCTION TO MODERN SPANISH LITERATURE.—Reading of representative modern and contemporary novels as an induction into the study of literature and as a means of maturing the student's command of the language. Prerequisite: Spanish 3-4, or equivalent. 3 s.h. (W & E)

ASSOCIATE PROFESSOR CASTELLANO AND STAFF

66. INTRODUCTION TO MODERN SPANISH LITERATURE.—Study and oral interpretation of modern and contemporary plays, with continued stress on achievement of ability to read without translating. Prerequisite: Spanish 65 or equivalent. 3 s.h. (W & E)

ASSOCIATE PROFESSOR CASTELLANO AND STAFF

68. INTRODUCTION TO SPANISH-AMERICAN LITERATURE.—Reading of selected modern novels typical of Spanish-American life, culture, and thought. This course is offered sometimes as an alternate to Spanish 66 and is accepted in fulfillment of major and graduation requirements. 3 s.h.

STAFF

71. INTERMEDIATE CONVERSATION.—Prerequisite: completion of Spanish 4 or consent of instructor. To be taken concurrently with Spanish 65. Enrollment limited to 10 students per section. 1 s.h. (E)

MRS. CASTELLANO

72. INTERMEDIATE CONVERSATION.—Prerequisite: Spanish 71. To be taken concurrently with Spanish 66 or 68. 1 s.h. (E)

MRS. CASTELLANO

155. REPRESENTATIVE WRITERS OF SPANISH-AMERICAN LITERATURE.—Reading and discussion of major works which illustrate literary trends from the early Colonial period to 1880. 3 s.h. (E)

ASSISTANT PROFESSOR FEIN

156. REPRESENTATIVE WRITERS OF SPANISH-AMERICAN LITERATURE.—Study of works which are examples of the principal literary currents after 1880, with particular reference to their relationship to social ideas and problems in the same period. 3 s.h. (E)

ASSISTANT PROFESSOR FEIN

173. ADVANCED CONVERSATION.—One hour a week will be devoted to a review of the elements of syntax. The remainder of the course aims to develop facility of expression through constant drill on vocabulary and conversational idiom. Prerequisite: Spanish 66 (or 68) and 71-72, or permission. 3 s.h. (E)

ASSOCIATE PROFESSOR CASTELLANO

174. PHONETICS AND DICTION.—This course is intended to round out the students's oral experience, with emphasis on accurate pronunciation. Use is made of phonographic demonstrations and corrective exercises, with individual recordings. Prerequisite: Spanish 173 or special permission. 3 s.h. (E)

ASSOCIATE PROFESSOR CASTELLANO

257. OLD SPANISH LANGUAGE.—The historical development of the language together with illustrative readings. 3 s.h. (E)

ASSOCIATE PROFESSOR DAVIS

258. OLD SPANISH LITERATURE.—The literature of the Middle Ages and the Early Renaissance. 3 s.h. (E)

ASSOCIATE PROFESSOR DAVIS

260. ADVANCED COMPOSITION AND SYNTAX.—Study of fundamental difficulties in the language; practice in writing idiomatic Spanish; exercises in free composition. For students who have a satisfactory command of Spanish grammar and fair conversational ability. Prerequisite: Spanish 173-174 or permission. 3 s.h. (E)

ASSOCIATE PROFESSOR CASTELLANO

261-262. MODERN SPANISH NOVEL.—The evolution of the novel from the *costumbrista* writers through the generation of 1898. Prerequisite: 6 semester hours from courses 155 to 174 inclusive, or 65-66 (or 68) and instructor's permission. 6 s.h. (E)

264. MODERN AND CONTEMPORARY SPANISH THEATRE.—A brief review of the modern and contemporary Spanish theatre from the period of Romanticism. Lectures, reading and discussion of the most representative works of Benavente, Martínez Sierra, los hermanos Quintero, etc. 3 s.h. (E)

ASSOCIATE PROFESSOR CASTELLANO

265. GOLDEN AGE LITERATURE: CERVANTES.—The life and thought of Cervantes with special emphasis on his *Quijote*. 3 s.h. PROFESSOR PREDMORE

266. GOLDEN AGE LITERATURE: THE DRAMA.—Study of the chief Spanish dramatists of the seventeenth century with readings of representative plays of this period. 3 s.h. ASSOCIATE PROFESSOR CASTELLANO

275. CONTEMPORARY SPANISH LITERATURE: ESSAY AND LYRIC POETRY.—A study of the revision of national values and literary expression in the twentieth century with particular reference to the crisis of 1898 and to the enrichment of the Spanish tradition through extrapeninsular influences. 3 s.h. (E)

PROFESSOR PREDMORE

276. CONTEMPORARY SPANISH LITERATURE: NOVEL.—A study of tradition and innovation in the twentieth century Spanish novel with emphasis on the novels of Unamuno, Baroja, Valle Inclán, and Pérez de Ayala. 3 s.h. (E)

PROFESSOR PREDMORE

#### THE TEACHING OF ROMANCE LANGUAGES

118. THE TEACHING OF ROMANCE LANGUAGES.—Evaluation of objectives and methods; a study of the practical problems involved in the teaching of reading, writing, hearing, and speaking; analysis of text books, teaching aids, and testing technique. 3 s.h. (E)

ASSOCIATE PROFESSOR DAVIS

#### DEPARTMENTAL MAJOR

##### Prerequisites:

For French: French 51-52, or equivalent.

For Spanish: Spanish 65-66 (or 68), or equivalent.

##### Major Requirements:

For French: Eighteen semester hours of work must be completed in courses numbered above 100 and must include: (a) six semester hours in course 127-128; (b) six semester hours of literature in courses 213 to 238.

For Spanish: Eighteen semester hours of work must be completed in courses numbered above 100 and must include: (a) six semester hours of linguistic training (courses 173-174, 260); (b) six semester hours of literature in the courses numbered above 200.

#### RUSSIAN

ASSISTANT PROFESSOR WIENER

51-52. INTRODUCTION TO THE RUSSIAN LANGUAGE.—Open to freshmen with the approval of the dean. 6 s.h. (w) ASSISTANT PROFESSOR WIENER

53-54. INTERMEDIATE RUSSIAN LANGUAGE.—Prerequisite: Russian 51-52 or equivalent. 6 s.h. (E) ASSISTANT PROFESSOR WIENER

63-64. INTRODUCTION TO SCIENTIFIC AND MEDICAL RUSSIAN.—Introduction to the Russian language as used in the various contemporary sciences. Prerequisite: Russian 51-52 or equivalent. 6 s.h. (w) ASSISTANT PROFESSOR WIENER  
[Not offered in 1951-52]

101-102. RUSSIAN CULTURE AND LITERATURE THROUGH THE NINETEENTH CENTURY.—After a brief survey from earliest times through eighteenth-century classicism, enlightenment, and sentimentalism, attention is focused on the

literature of the nineteenth century, and the development of romanticism and of the realist school. Special attention is given to the works of Pushkin, Lermontov, Gogol, Goncharov, Turgenev, Tolstoi, Dostoevski, Chekhov, and Gorki. Readings are assigned in English translation. 6 s.h. (w) ASSISTANT PROFESSOR WIENER

103. AN INTRODUCTION TO SOVIET LITERATURE AND CULTURE.—An analysis of the development of Russian literature and culture since the Bolshevik revolution and of the effect of Soviet policy on the literary production of the time. A survey of the important literary currents from Gorki and Mayakovski through Sholokhov. Lectures and class discussion. Readings will be assigned in English translation. 3 s.h. (E) ASSISTANT PROFESSOR WIENER

112. PUSHKIN AND THE BIRTH OF RUSSIAN REALISM.—A study of Pushkin and his contemporaries from the point of view of their relationship to the development of the Russian romantic movement and to the emergence of an independent Russian realistic approach to literature. An analysis of the influence of Western literary figures, particularly Byron, on the development of Russian letters of the early nineteenth century. Readings are assigned in English translation. Prerequisite: Russian 101 or consent of the instructor. 3 s.h. (E) ASSISTANT PROFESSOR WIENER

## SOCIOLOGY AND ANTHROPOLOGY

PROFESSOR JENSEN, CHAIRMAN AND DIRECTOR OF UNDERGRADUATE STUDIES, EAST CAMPUS; ASSOCIATE PROFESSOR SCHETTLER, DIRECTOR OF UNDERGRADUATE STUDIES, WEST CAMPUS, AND SUPERVISOR OF FRESHMAN INSTRUCTION; PROFESSORS HART AND THOMPSON; ASSOCIATE PROFESSOR LA BARRE; ASSISTANT PROFESSOR WHITRIDGE; MR. ROY

91-92. GENERAL SOCIOLOGY.—The same as course 101, except that it gives an additional hour of credit to permit the introduction of more concrete materials. 6 s.h. (E & w) PROFESSOR JENSEN; ASSOCIATE PROFESSOR SCHETTLER; ASSISTANT PROFESSOR WHITRIDGE; MR. ROY

101. GENERAL SOCIOLOGY.—An introduction to the scientific study of social life; its origin, evolution, and organization as illustrated by the study of a number of concrete social problems. 5 s.h. *each semester*. (w) MR. ROY

### 1. ANTHROPOLOGY

111. GENERAL ANTHROPOLOGY.—Origins and distribution of the races of mankind; a survey of human palaeontology and human biology, world archaeology, prehistory and languages; and the origins of the family, primitive economics, arts, social and political organization. Special attention is given to primitive peoples. 3 s.h. ASSOCIATE PROFESSOR LA BARRE

112. CULTURAL ANTHROPOLOGY.—A study of the dynamics of culture, the causal factors, functions, integration and disintegration, diffusion, growth and change of cultures. Emphasis is upon the simpler societies. 3 s.h. ASSOCIATE PROFESSOR LA BARRE

211. PEOPLES OF THE WORLD.—A comparative study of cultures the world over, including marriage, religion, economics, social and political organization, art and music, with emphasis upon preliterate peoples. Prerequisite: course 91-92, or 101, or 111 or 112. 3 s.h. ASSOCIATE PROFESSOR LA BARRE

212. PRIMITIVE RELIGION.—The ethnography, the social functions and the socio-psychological meanings of religion in primitive societies. Prerequisite: course 91-92, or 101, or 111 or 112. 3 s.h. ASSOCIATE PROFESSOR LA BARRE

213. PERSONALITY AND SOCIETY.—The sociology and social psychology of human personality, its origins in the primary group, its nature and varieties, and its integrations into secondary group institutions, with emphasis upon the normal personality and its adjustments in our society and to our culture. Prerequisite: course 91-92, or 101, or 111 or 112. 3 s.h. ASSOCIATE PROFESSOR LA BARRE

[Admission only by consultation with the instructor.]



214. **PERSONALITY AND CULTURE.**—The influence of culture patterns and social institutions on character structure, socialization of the individual and the dynamics of human personality. Comparative anthropological materials will be drawn upon. Prerequisite: course 213. 3 s.h. ASSOCIATE PROFESSOR LA BARRE  
[Admission only by consultation with the instructor.]

## II. COMMUNITY, RACE AND CULTURE

(Course 91-92, or 101, or 111 or 112 prerequisite for all courses.)

133. **SOCIOLOGY OF THE SOUTH.**—The developing regional organization of the world economy studied with especial reference to Southern life and problems. A survey of the composition and distribution of population, races and race relations; economic conditions underlying population, race factors and culture of the South. Primary emphasis is upon social change and its control. 3 s.h.

PROFESSOR THOMPSON

134. **HUMAN ECOLOGY.**—A study of the human community in its competitive and cooperative aspects. 3 s.h.

PROFESSOR THOMPSON

136. **HUMAN MIGRATION.**—A study of mankind in motion, including a consideration of the nature of migration, types of migration and settlement, and problems of migratory contacts. 3 s.h.

PROFESSOR THOMPSON

[Not offered in 1951-52]

137. **THE NEGRO IN AMERICA.**—A study of the history and changing status of the Negro regarded as a symbol and protagonist of minority groups in America and elsewhere. 3 s.h.

PROFESSOR THOMPSON

[Not offered in 1951-52]

233. **RURAL SOCIOLOGY.**—The sociology of the land; peasant and folk societies and cultures; patterns of rural settlement like the farm, the plantation, the ranch and others; rural personality types; the changing character of rural life; rural problems. 3 s.h. Second semester.

PROFESSOR THOMPSON

235. **URBAN SOCIOLOGY.**—A study of the city and civilization, the newspaper, the social survey, the slum and housing, neighborhoods and natural areas, urban institutions, urban problems, and city planning. 3 s.h.

PROFESSOR THOMPSON

237. **COMMUNITY AND SOCIETY.**—This course seeks to provide a frame of reference for the analysis and ordering of facts pertaining to the diverse cultures of the world, the State, the world community, the Great Society, news, mass behavior, social problems, races and classes. 3 s.h.

PROFESSOR THOMPSON

238. **RACE AND CULTURE.**—A study of the nature of race and of the relationships and problems of race. 3 s.h.

PROFESSOR THOMPSON

## III. COLLECTIVE BEHAVIOR

(Course 91-92, or 101, or 111 or 112 prerequisite for all courses.)

142. **THE SOCIOLOGY OF DISCUSSION.**—A course designed to develop practical social skills in intellectual cooperation. In the light of sociological theory of intellectual conflict, competition and cooperation, practice will be provided in the group solution of problems through committees, conferences and forums, and in the discussion processes whereby cooperation can be substituted for social antagonism. Prerequisites: either Sociology 91, 101, or 111, and six hours to be selected from history, political science, Economics 105 and 155, and Education 115 and 176. Enrolment limited to a maximum of 30. 3 s.h. (w)

PROFESSOR HART

149. **INTRODUCTION TO CHILD WELFARE.**—A study of heredity and environment as factors in personality development: infant conservation; welfare responsibilities of the school, emphasizing the physical and mental well-being of the child, play, and compulsory and industrial education; child labor, diagnosis and treatment of delinquency; care of the dependent and neglected child; child-caring agencies, public and private; and a community program of child welfare. 3 s.h. (E)

PROFESSOR JENSEN



243. **SOCIAL ATTITUDES AND COLLECTIVE BEHAVIOR.**—Study of attitudes as products of social interaction; organization of attitudes into personal behavior patterns; expression of social attitudes in social, political and industrial groups; social unrest and the behavior of crowds and mobs; analysis of social movements, strikes, revolutions, and other group organizations. 3 s.h. (w)

ASSOCIATE PROFESSOR SCHETTTLER

246. **PUBLIC OPINION AND PROPAGANDA.**—Nature and development of public opinion; relation to attitude, biases, stereotypes and controversial issues; role of leaders, pressure groups and minority groups; use of radio, press, motion picture and graphic arts; propaganda and censorship; measurements of public opinion. 3 s.h. (w)

ASSOCIATE PROFESSOR SCHETTTLER

249. **CHILD WELFARE.**—A special course in child welfare designed primarily for graduates. Not open to students who have had course 149. 3 s.h. (E)  
[Not offered in 1951-52]

PROFESSOR JENSEN

250. **MARRIAGE AND THE FAMILY.**—An analysis of contemporary marriage and family experience with emphasis on its functions, problems, resources and values. Not open to students who have received credit for Religion 170. 3 s.h. (E)

PROFESSOR HART

#### IV. SOCIAL ORGANIZATION AND DISORGANIZATION

(Course 91-92, or 101, or 111 or 112 prerequisite for all courses.)

153. **THE FIELDS OF SOCIAL WORK.**—A non-professional course, designed to acquaint the student with the types of problems existing in both rural and urban communities which can be dealt with in a remedial and preventive way; how they arise in the reciprocal interaction of personality and culture, what their effects are in terms of personal and social disorganization, how communities are organized to deal with them, and social agencies which have been developed to deal with problems of each type, together with an evaluation of effectiveness of the techniques employed. 3 s.h. (E)

ASSISTANT PROFESSOR WHITRIDGE

157. **SOCIAL CHANGE AND SOCIAL CONTROL.**—Basic nature of inventions as related to ideological and material factors; role of the inventor, reformer, and non-conformist; mobility, diversification and individualism as by-products of social change; techniques of social control in the family, school, church, industry and government; social planning and leadership in a dynamic society. 3 s.h. (E)

ASSOCIATE PROFESSOR SCHETTTLER

158. **SOCIOLOGY OF THE PROFESSIONS AND OCCUPATIONS.**—Analysis of the professional and occupational structure of the American economy; shifts and trends in occupations and professions for men, women and minority groups; social and economic characteristics of occupational and professional groups; factors in the selection of a profession or occupation; sources of information about occupations and professions; measurements of aptitudes, abilities and skills; employer-employee relationships. 3 s.h. (E)

ASSOCIATE PROFESSOR SCHETTTLER

165. **INTRODUCTION TO INDUSTRIAL SOCIOLOGY.**—An analysis and appraisal of the various factors that affect human relations in industry. It will deal with the interpersonal and intergroup relationships within the individual industrial unit which determine its efficiency as an economic and social institution; the social relationships of workers with one another and with management; their influence upon productivity, the relations of the worker toward the job, labor turnover, absenteeism, etc, and the social conditions in the community, housing, family life, recreation, etc., as they affect the social relations within the industrial community. 3 s.h. (w)

MR. ROY

166. **INDUSTRY AND SOCIETY.**—A study of industrial institutions in their interrelationships with other forms of social behavior in the broad cultural setting of western civilization. The emphasis in this course will be on an examination of the influence of changes in the technical and social organization of industry upon community organization, social stratification, social mobility, social interaction, and personality development. Attention will center upon analysis of specific social problems resulting from the impact of industrial change. 3 s.h. (w)

MR. ROY

262. EDUCATION AND THE CULTURAL PROCESS.—A study of education (1) as carried on traditionally among preliterate and folk peoples, and (2) as it becomes a problem in racially and culturally complex societies like that of the United States. 3 s.h.

PROFESSOR THOMPSON

[Not offered in 1951-52]

271. SOCIAL PATHOLOGY.—A study of the causes, extent, significance, and constructive treatment of the principal forms of pathology in modern society; poverty, physical defectiveness, malnutrition, mental deficiency, mental disease, undirected leisure activities and unstandardized commercial recreation, alcoholism, prostitution, vagrancy, and delinquency. 3 s.h. (E)

PROFESSOR JENSEN

273. SPECIAL PROBLEMS IN SOCIAL PATHOLOGY.—Research projects in social and personal disorganization, limited to advanced students with the approval of the instructor. 1 to 3 s.h. *each semester*. (w)

PROFESSOR JENSEN

276. CRIMINOLOGY.—A study of the original tendencies of man and the problem of socializing these tendencies; the relations of physical and mental defectiveness and untoward influence in the home and neighborhood to crime; the development of criminological theory and procedure, emphasizing penal and reform methods, and especially modern methods of social treatment and prevention of crime. 3 s.h. (w)

PROFESSOR JENSEN

277. JUVENILE DELINQUENCY.—An intensive study of current research findings as to the nature, causes, extent and distribution of juvenile delinquency; individual and institutional methods of treatment and prevention; diagnostic clinics, juvenile courts and probation, training schools, coordinating councils and preventive agencies. 3 s.h.

## V. SOCIAL THEORY

(Course 91-92, or 101, or 111 or 112 prerequisite for all courses.)

286. SOCIAL ETHICS.—A study of sociological fundamentals underlying ethics, including the controversy between materialistic and idealistic social thinkers, the nature of personalities and of social organization, the nature of social values, types of social interaction and their effects upon general social values, underlying principles and facts of social change, and the bearings of all these upon certain social problems. 3 s.h. (w)

PROFESSOR HART

288. CONTEMPORARY PROBLEMS IN CULTURAL LAG.—An exploration of such sociological problems as social evolution, cultural lag, conflict, accommodation, leadership, and social reform, in relation to the crisis of civilization, precipitated by the development of the atomic bomb and by kindred discoveries and inventions. 3 s.h. (w)

PROFESSOR HART

## VI. METHODS OF SOCIAL RESEARCH

(Course 91-92, or 101, or 111 or 112 prerequisite for all courses.)

191. PRINCIPLES OF SOCIAL CASE INVESTIGATION.—A non-professional course designed to acquaint the student with the basic research techniques employed in the case study of the interrelationships of personality and culture in various fields of sociological and anthropological interest. 3 s.h. (E)

ASSISTANT PROFESSOR WHITRIDGE

193. BASIC STATISTICAL METHODS IN SOCIOLOGY.—The processes of definition, classification, measurement, tabulation, association, correlation, comparison of averages and of percentages, prediction, preparation and interpretation of tables and charts, as applied to and illustrated by sociological data. One lecture, one recitation and three laboratory hours. 3 s.h.

PROFESSOR HART

292. STATISTICAL TECHNIQUES IN SOCIOLOGY.—Intended for graduate students, and for undergraduates who are ready to undertake original statistical research projects. 3 s.h.

PROFESSOR HART

293. SPECIAL PROBLEMS IN SOCIAL STATISTICS.—Applications of statistical techniques to specific research topics. Limited to advanced students with permission of the instructor. 1 to 3 s.h. *each semester*.

PROFESSOR HART

## DEPARTMENTAL MAJOR

Sociology 91-92 or 101 and twelve additional hours, at least six semester hours of which must be Senior-Graduate courses.

## ZOOLOGY

PROFESSOR GRAY, CHAIRMAN; ASSOCIATE PROFESSOR BOOKHOUT, DIRECTOR OF UNDERGRADUATE STUDIES; ASSISTANT PROFESSOR ROBERTS, SUPERVISOR OF FRESHMAN INSTRUCTION; PROFESSORS HARGITT AND WILBUR; ASSOCIATE PROFESSORS HUNTER AND WHARTON; ASSISTANT PROFESSORS BAILEY AND HORN; DR. SANDEEN; MESSRS. BALL, COLF AND WILKS; MRS. BURKUS

## UNDERGRADUATE COURSES

1. GENERAL ZOOLOGY.—A brief survey of the animal kingdom. 4 s.h. (w & E) ASSOCIATE PROFESSORS BOOKHOUT AND HUNTER AND STAFF

2. ANIMAL BIOLOGY.—The principles of biology as applied to animals. Prerequisite: Zoology 1. 4 s.h. (w & F) ASSOCIATE PROFESSOR HUNTER AND ASSISTANT PROFESSOR ROBERTS AND STAFF

53. COMPARATIVE VERTEBRATE ANATOMY.—A study of the anatomy and evolution of the organ systems of vertebrates. Prerequisites: Zoology 1, 2. 4 s.h. (w & E) ASSISTANT PROFESSOR ROBERTS AND STAFF

92. GENERAL EMBRYOLOGY.—A study of the fundamental principles of embryology as illustrated in the frog, chick and mammal. Prerequisite: Zoology 53. 4 s.h. (w & E) ASSISTANT PROFESSOR HORN AND STAFF

109. EVOLUTION.—The facts and theories of organic evolution. Prerequisite: two years of zoology. 2 s.h. (w) ASSISTANT PROFESSOR BAILEY

110. INTRODUCTION TO GENETICS.—The principles and practical applications of genetics as applied to animals, including man. Prerequisite: one year of zoology. 2 s.h. (w) ASSISTANT PROFESSOR ROBERTS

120. ORNITHOLOGY.—Lectures, laboratory and field trips dealing with the classification, adaptations, and natural history of birds. Prerequisite: one year of zoology. Zoology 53 recommended. 4 s.h. (w) ASSISTANT PROFESSOR BAILEY

142. INTRODUCTION TO HUMAN PHYSIOLOGY.—An introductory survey of physiological functions with special reference to man. Not open to pre-medical students. Prerequisite: Zoology 53. 4 s.h. (E) DR. SANDEEN

152. COMPARATIVE PHYSIOLOGY.—Comparative studies of the physiological processes of invertebrate and vertebrate animals. Prerequisites: one year of zoology and at least one year of chemistry. 4 s.h. (w) PROFESSOR WILBUR

156. VERTEBRATE HISTOLOGY.—The microscopic structure of normal tissues and organs of the vertebrate body. Training will be given in the preparation of material for microscopic study. Prerequisite: Zoology 53. 4 s.h. (w) PROFESSOR HARGITT

161. ANIMAL PARASITES.—With emphasis upon those infesting man. Prerequisite: one year of zoology. 4 s.h. (w) ASSOCIATE PROFESSOR WHARTON

193. FUNDAMENTALS OF ZOOLOGY.—The principles involved in the study of structure, function, ecology, genetics, classification, and evolution of animals. An elementary course without laboratory designed for senior students. Not open to students who have had previous courses in zoology. 3 s.h. (w) PROFESSOR GRAY

196. SEMINAR: CURRENT DEVELOPMENTS IN ZOOLOGY.—Prerequisites: Zoology 53, 92, and 152 or 271. Open only to seniors. 2 s.h. (w) STAFF

## FOR SENIORS AND GRADUATES

202. HELMINTHOLOGY.—Classification, morphology, and host relations of parasitic worms. Lectures, readings, reports and laboratory work. Offered in alternate years. Prerequisite: Zoology 161. 4 s.h. (w) ASSOCIATE PROFESSOR HUNTER

204. **ADVANCED PARASITOLOGY.**—Lectures, conferences, readings, and laboratory work, dealing with practical and theoretical matters relating to animal parasites. Offered in alternate years. Prerequisite: Zoology 161. 4 s.h. (w)

ASSOCIATE PROFESSOR WHARTON

219, 220. **SPECIAL PROBLEMS.**—Senior majors who have had proper training may be permitted to carry on special work. Permission must be obtained from the Director of Undergraduate Studies and the instructor under whom the student wishes to work. Not more than 4 s.h. (w & E)

STAFF

222. **ENTOMOLOGY.**—A study of anatomy, physiology, embryology, and classification of insects. Offered in alternate years. Prerequisite: One year of Zoology. 4 s.h. (w)

PROFESSOR GRAY

224. **VERTEBRATE ZOOLOGY.**—A study of life histories, adaptations, ecology and classification of vertebrate animals. Offered in alternate years. Prerequisite: Zoology 53. 4 s.h. (w)

PROFESSOR GRAY

229. **ENDOCRINOLOGY.**—The structure, physiology, and embryology of the endocrine glands. Lectures, reading assignments, reports and laboratory work. Prerequisites: Zoology 53, 92. 4 s.h. (w)

238. **SYSTEMATIC ZOOLOGY.**—The fundamental theory and practice involved in the collection, identification, and classification of animals. Offered in alternate years. Prerequisites: Zoology 1, 2. 4 s.h. (w)

ASSOCIATE PROFESSOR WHARTON

253. **ADVANCED VERTEBRATE MORPHOLOGY.**—Lectures, reports, and reading assignments in the comparative morphology of the vertebrates, with particular emphasis on theories concerning the interrelationships of vertebrates and the origin of certain vertebrate structures. Advanced laboratory study of structure in selected groups of vertebrates. Offered in alternate years. Prerequisites: Zoology 53, 92. 4 s.h. (w)

ASSISTANT PROFESSOR HORN

271. **GENERAL PHYSIOLOGY.**—The physiological processes of living matter approached through studies of cells and tissues. Prerequisites: two years of biology and at least one year of chemistry. 4 s.h. (w)

PROFESSOR WILBUR

274. **INVERTEBRATE ZOOLOGY.**—A study of structure function, and habits of invertebrate animals under normal and experimental conditions. Field trips will be made to study, collect, and classify animals in their natural habitats. Offered in alternate years. Prerequisites: Zoology 1, 2. 4 s.h. (w)

ASSOCIATE PROFESSOR BOOKHOUT

276. **PROTOZOOLOGY.**—The morphology, physiology, taxonomy, and culture of protozoa. Offered in alternate years. Prerequisites: Zoology 1, 2. 4 s.h. (w)

ASSOCIATE PROFESSOR BOOKHOUT

278. **INVERTEBRATE EMBRYOLOGY.**—Lectures, readings and laboratory work dealing with rearing, life history and development of invertebrates. Offered in alternate years. Prerequisite: Zoology 92. 4 s.h. (w)

ASSOCIATE PROFESSOR BOOKHOUT

For summer courses in Marine Biology consult the Bulletin of the Duke University Marine Laboratory.

#### RELATED COURSES, ONE OF WHICH MAY BE COUNTED TOWARD A

##### MAJOR IN ZOOLOGY

BOTANY 101. PRINCIPLES OF HEREDITY.—3 or 4 s.h. (w)

ASSOCIATE PROFESSOR PERRY

BOTANY 202. GENETICS.—4 s.h. (w)

ASSOCIATE PROFESSOR PERRY

##### DEPARTMENTAL MAJOR

*Prerequisites:* Zoology 1 and 2.

*Major Requirements:* Twenty-four semester hours including courses 53, 92, and 152 or 271. The remaining twelve hours may be from any other courses for which the student is eligible. Related work, usually chosen from courses in botany, chemistry, geology, mathematics, and physics, must include at least one year of chemistry.



# Courses of Instruction College of Engineering



## CIVIL ENGINEERING

PROFESSORS BIRD AND HALL; ASSOCIATE PROFESSOR SNOW; ASSISTANT PROFESSORS LEWIS, PALMER, AND WILLIAMS; MESSRS. BROWN AND WILDER

61. PLANE SURVEYING.—Use of instruments; transit, stadia and compass surveying; determination of meridian by observation on Polaris; differential and profile leveling; setting grade stakes; calculation of bearings, latitudes, departures and areas; methods of plotting; survey and plot of portions of campus by stadia, and transit and tape; care and adjustment of instruments. Prerequisites: G.E. 1 and Math 6. 4 s.h. (w)  
MR. BROWN

62. ADVANCED SURVEYING.—Simple triangulation; topographic surveying using stadia and plane table; laying out and division of land; public land system; calculations; grading plans and quantities; determination of azimuth by H. O. 211. Prerequisite: C.E. 61. 4 s.h. (w)  
MR. BROWN

108. ADVANCED STRENGTH OF MATERIALS.—Applications of Mohr's circle, deflections, and energy of strain to advanced problems. Prerequisite: G.E. 107. 3 s.h. (w)  
ASSISTANT PROFESSOR WILLIAMS  
[Offered only upon sufficient demand; enrollment limited.]

110. PLANE SURVEYING.—The equivalent of C.E. 61 given especially for students in forestry. See *Bulletin of Summer Session*. 4 s.h. (w)  
MR. BROWN

113. ROUTE SURVEYING.—Thorough drill in the calculation and laying out of simple, compound, and easement curves; widening of curves; vertical curves; setting slope stakes; ordinary earthwork computations and mass diagrams. Prerequisite: C.E. 61. 3 s.h. (w)  
ASSISTANT PROFESSOR WILLIAMS

116. HIGHWAY ENGINEERING.—Location, design, construction and maintenance of highways and city streets; soil stabilization; traffic studies; economics of planning and design. Prerequisites: C.E. 113, C.E. 135. 3 s.h. (w)  
ASSISTANT PROFESSOR WILLIAMS

118. MATERIALS OF ENGINEERING.—Study and testing of materials commonly used in civil engineering; proportioning concrete. Prerequisite: G.E. 107 or concurrent. 3 s.h. (w)  
ASSISTANT PROFESSOR WILLIAMS

120. ENGINEERING STATISTICS.—Statistical methods applied to engineering problems. Typical engineering data analyzed to illustrate arithmetically and geometrically normal distributions; binomial distribution; Poisson's distribution. Testing data of engineering materials and the use of student's distribution. Sequential analysis and control of production quality. 3 s.h. (w)  
ASSOCIATE PROFESSOR SNOW

[Offered only upon sufficient demand; enrollment limited.]

121. HYDROLOGY.—Fundamentals of meteorology; precipitation; evaporation. Ground water development. Stream flow and stream gaging. Hydrograph analysis. Flood control. Field trips to be arranged. Prerequisite: G.E. 128. 3 s.h. (w)  
ASSOCIATE PROFESSOR SNOW

[Offered only upon sufficient demand; enrollment limited.]



123. WATER SUPPLY AND SEWAGE.—Statistical analysis of rainfall and run-off records; population estimation; analysis of the yield of watersheds and storage requirement; design of water distribution systems; design of sanitary and storm sewerage systems. Prerequisite: G.E. 128. 4 s.h. (w) ASSOCIATE PROFESSOR SNOW

124. WATER PURIFICATION AND SEWAGE TREATMENT.—Chemical and bacteriological analysis of water and sewage effluents; design of water purification treatment systems; design of sewage treatment plants. Prerequisite: C.E. 123. 3 s.h. (w) ASSOCIATE PROFESSOR SNOW

128. INDUSTRIAL WATER SUPPLIES.—Water quality for industrial uses. Analytical techniques and interpretation of results. Boiler feed water requirements; softening; ion exchange; deaeration, priming; foaming; corrosion; embrittlement. Control of treatment processes. Prerequisite: Chemistry 1-2. 3 s.h. (w) ASSOCIATE PROFESSOR SNOW

[Offered only upon sufficient demand; enrollment limited.]

129-130. ELEMENTARY STRUCTURES.—Stresses in beams and trusses for fixed and moving loads. Deflection of beams and trusses. Design of tension, compression, and flexural members; connections; and plate girders. Design of reinforced concrete beams, slabs, columns, footings, and retaining walls. (For students not majoring in Structural Engineering.) Prerequisite: G.E. 107. 6 s.h. (w) ASSISTANT PROFESSOR PALMER

[Offered only upon sufficient demand; enrollment limited.]

131. STRUCTURES.—ANALYSIS AND ELEMENTARY DESIGN.—Stresses in roofs, parallel and inclined chord bridges, including sub-divided panels, by algebraic and graphic methods under all conditions of loading; shear and moments in frames and bents; influence lines; Williot diagram. Structural drafting, details in steel and wood; methods of fabrication and erection. Prerequisites: G.E. 57, 107. 5 s.h. (w) ASSISTANT PROFESSOR PALMER

132. STRUCTURES.—DESIGN.—Tension, compression, flexural members, end posts, eccentric connections, unsymmetrical bending; riveted and welded plate girders; trusses and office building frames; wind analysis. Design and detail drawings. Prerequisite: C.E. 131. 5 s.h. (w) ASSISTANT PROFESSOR PALMER

133. REINFORCED CONCRETE.—Theory and design of reinforced concrete beams, slabs, and columns including eccentric loads; footings; retaining walls. Prerequisite: G.E. 107. 4 s.h. (w) PROFESSOR BIRD

135. SOIL MECHANICS.—Identification and classification; flow nets; frost action; stability of foundations, cuts and embankments, and retaining walls; settlement. Laboratory includes identification, permeability, shear, unconfined compression, consolidation and compaction tests. Prerequisite: G.E. 107. 3 s.h. (w) PROFESSOR BIRD

137-138. SEMINAR.—Students are required to make reports and to talk on current engineering literature or on such other topics as may be assigned. 2 s.h. (w) ASSISTANT PROFESSOR PALMER

[Offered only upon sufficient demand; enrollment limited.]

140. INDETERMINATE STRUCTURES.—Application of least work, slope deflection, moment distribution, and column analogy. Analytic, graphic, and experimental methods are used. Prerequisites: C. E. 131, C.E. 133. 3 s.h. (w) PROFESSOR BIRD

142. HYDRAULIC ENGINEERING.—Static and dynamical principles of fluids applied to specific engineering problems. Effects of gravity, viscosity, compressibility, and surface tension on fluid motion in closed conduits and open channels; surface and form resistance; dimensional analysis and theory of models. Non-uniform flow in open channels. Hydraulic jump, backwater curves. Hydraulic problems of flood control, flood routing. Dam design. Prerequisite: G.E. 128 or M.E. 105. 3 s.h. (w) ASSISTANT PROFESSOR WILLIAMS

[Offered only upon sufficient demand; enrollment limited.]

143-144. **PROJECTS IN CIVIL ENGINEERING.**—This course may be assigned by the Chairman of the Department to certain seniors who have shown an aptitude for research in one distinct field of civil engineering, in which case it may be substituted for certain general civil engineering courses. 2-6 s.h. (w) STAFF

## ELECTRICAL ENGINEERING

PROFESSOR SEELEY, CHAIRMAN; ASSOCIATE PROFESSOR MEIER; ASSISTANT PROFESSORS EGERTON, KRAYBILL, AND VAIL; MESSRS. HEDGECOCK, JARRETT, AND JENKINS

51. **SURVEY OF ELECTRICAL ENGINEERING.**—A course designed to give the student a general survey of the engineering profession, to define the scope of activities of the electrical engineer, and to provide an introduction to engineering problems. One two-hour computation. 1 s.h. (w) ASSISTANT PROFESSOR KRAYBILL

52. **ELECTRIC AND MAGNETIC FIELDS.**—An introductory course covering a mathematical and physical analysis of energy relations in electrostatic and magnetostatic fields; resistance, capacitance and inductance of systems of conductors; systems of electric and magnetic units. Two recitations and one two-hour computation. Prerequisites: E.E. 51, Mathematics 52. Physics 52, Mathematics 53 concurrently. 3 s.h. (w) ASSISTANT PROFESSOR VAIL

101-102. **CIRCUITS IN ELECTRICAL ENGINEERING.**—A two-semester course covering methods of electric and magnetic circuit analysis applicable in all branches of electrical engineering; alternating and direct currents; the algebra of vectors and complex quantities; networks; nonsinusoidal waves; coupled circuits; transients; polyphase circuits; symmetrical components. Prerequisite: E.E. 52, E.E. 107-108 and Mathematics 131 concurrently. 6 s.h. (w) ASSISTANT PROFESSOR VAIL

105. **ELECTRICAL MEASUREMENTS.**—A course covering direct-current and low-frequency measurements; the theory, calibration, and use of laboratory standards, potentiometers, instrument transformers, and power and energy measuring apparatus; and audio-frequency measurements of impedance, current and potential. Three class sessions and one three-hour laboratory. Prerequisite: E.E. 52, Mathematics 131 and E.E. 101 concurrently. 4 s.h. (w) MR. HEDGECOCK

106. **ELECTRON TUBES AND CIRCUITS.**—A course covering electronic emission, static and dynamic tube characteristics, rectification, glow-discharge tubes, amplifiers, oscillators, and other typical circuits. Three class sessions and one three-hour laboratory. Prerequisites: E.E. 101, E.E. 105, E.E. 107, E.E. 102 and E.E. 108 concurrently. 4 s.h. (w) MR. HEDGECOCK

107-108. **CIRCUITS LABORATORY.**—A two-semester course designed to provide instruction in electrical laboratory techniques and in the preparation of engineering reports, and to provide experimental verification of the theory of course 101-102, with which it should be taken concurrently. One three-hour session. 2 s.h. (w) ASSISTANT PROFESSORS VAIL AND KRAYBILL

123. **PRINCIPLES OF ELECTRIC CIRCUITS.**—A course designed especially for students in other branches of engineering, covering fundamental electric units and both alternating and direct-current circuits. Three class sessions and one three-hour laboratory. Prerequisites: Mathematics 52 and Physics 52. 4 s.h. (w) ASSISTANT PROFESSORS KRAYBILL AND EGERTON; MR. JARRETT

124. **PRINCIPLES OF ELECTRIC MACHINERY.**—A course designed especially for students in other branches of engineering, covering the application of the principles of course E.E. 123 to alternating and direct-current machinery and associated apparatus. Three class sessions and one three-hour laboratory. Prerequisite: E.E. 123. 4 s.h. (w) ASSISTANT PROFESSORS KRAYBILL AND EGERTON; MR. JARRETT

148. **DIRECT-CURRENT MACHINERY.**—A study of the principles which underlie the design and operation of all types of direct-current generators, motors, and associated apparatus. Prerequisites: E.E. 101 and E.E. 107. E.E. 102 and E.E. 108 concurrently. 3 s.h. (w) ASSOCIATE PROFESSOR MEIER AND MR. JARRETT

158. **ELECTRIC-POWER SYSTEMS.**—A course providing a brief survey of the electric-power industry followed by a consideration of the economic and engineering features of power plant location and design, and by a study of the apparatus utilized in the generation, transmission and distribution of electric power. Prerequisites: E.E. 148, M.E. 104, and permission of instructor. E.E. 257-258 concurrently. Elective for electrical majors. 3 s.h. (w) PROFESSOR SEELEY  
[Offered only upon sufficient demand; enrollment limited.]

159. **TRANSMISSION.**—A development of the theory underlying the transmission of electric energy over conductors at both power and communication frequencies. Two class sessions and one two-hour computation. Prerequisites: E.E. 101-102, E.E. 105, E.E. 106, Mathematics 131. 3 s.h. (w) PROFESSOR SEELEY

161. **HIGH-VOLTAGE ENGINEERING.**—An introductory study of high-voltage phenomena and their engineering applications: behavior of gaps and insulators upon application of power-frequency and impulse voltages; corona; properties of insulating materials; high-voltage measurements; elements of high-voltage design. Two class sessions and one three-hour laboratory. Prerequisites: E.E. 101-102, E.E. 105, E.E. 106, and permission of instructor. Elective for electrical majors. 3 s.h. (w) ASSISTANT PROFESSOR VAIL  
[Offered only upon sufficient demand; enrollment limited.]

163-164. **ELECTRIC MACHINERY LABORATORY.**—A study of the technique of testing electric machines and a thorough analysis of their performance. Concurrent with E.E. 257-258. One three-hour session, for two semesters. 2 s.h. (w) ASSOCIATE PROFESSOR MEIER AND MR. JARRETT

165-166. **ELECTRICAL ENGINEERING SEMINAR.**—A course in which seniors are required to present oral reports and dissertations on material appearing in current engineering literature. Juniors may participate, but without credit. 2 s.h. (w) STAFF

171. **FUNDAMENTALS OF ILLUMINATION.**—A course designed to familiarize the student with some of the factors that influence seeing; to provide a working knowledge of lighting language, sources, and measuring techniques; and to acquaint the student with the basic factors involved in recommended lighting practice. Two class sessions and one two-hour computation. Prerequisites: E.E. 101-102 or E.E. 123, and permission of instructor. Elective. 3 s.h. (w) ASSISTANT PROFESSOR KRAYBILL  
[Offered only upon sufficient demand; enrollment limited.]

173-174. **PROJECTS IN ELECTRICAL ENGINEERING.**—A course which may be undertaken only by seniors who show special aptitude, or who may have had previous experience directly related to the proposed project. The consent of the Chairman of the Department must be obtained before registering. Elective for electrical majors. 3-6 s.h. (w) STAFF  
[Offered only upon sufficient demand; enrollment limited.]

180. **RADIO-FREQUENCY TRANSMISSION AND PROPAGATION.**—Theory and application of transmission and propagation at high and ultra-high frequencies: impedance-matching elements; coupling devices; cavity resonators; wave guides and antennas. Two class sessions and one three-hour laboratory. Prerequisites: E.E. 159, E.E. 261, and permission of instructor. E.E. 262 concurrently. Elective for electrical majors. 3 s.h. (w) MR. JENKINS  
[Offered only upon sufficient demand; enrollment limited.]

197. **INDUSTRIAL APPLICATIONS OF ELECTRICAL EQUIPMENT.**—A course of lectures, demonstrations, and recitations designed especially for students in other branches of engineering, dealing with the basic principles of utilization of a wide variety of electrical equipment in industrial practice. Emphasis is on industrial control, motor and generator applications, and electronic devices and applications. Prerequisite: E.E. 124 and permission of instructor. Elective for non-electricals. 3 s.h. (w) ASSOCIATE PROFESSOR MEIER  
[Offered only upon sufficient demand; enrollment limited.]

198. INDUSTRIAL CONTROL.—This course, open only to students majoring in electrical engineering, consists of a study of the electromagnetic and electronic control of electric motors in industrial applications. Prerequisites: E.E. 101-102, E.E. 106, E.E. 148, E.E. 257, and permission of the instructor. E.E. 258 concurrently. Elective for electrical majors. 3 s.h. (w) ASSOCIATE PROFESSOR MEIER  
[Offered only upon sufficient demand; enrollment limited.]

257-258. ALTERNATING-CURRENT MACHINERY.—A two-semester course dealing with the theory underlying the design, construction, and operation of synchronous generators, transformers, polyphase induction motors, synchronous motors, single-phase motors of all types, and converters and rectifiers. Prerequisites: E.E. 101-102 and E.E. 148. 6 s.h. (w)

ASSOCIATE PROFESSOR MEIER AND MR. JARRETT

261. COMMUNICATION ENGINEERING.—An advanced course dealing with the principles underlying radio communication with special emphasis on the development of methods and procedures for the mathematical analysis of electron tube circuits. Included are vacuum tube amplifiers, oscillators, special electron tube circuits, and introduction to pole and zero studies of response and impedance. Three class sessions and one three-hour laboratory. Prerequisites: E.E. 101-102, E.E. 105, E.E. 106, and Mathematics 131. 4 s.h. (w) MR. JENKINS

262. COMMUNICATION ENGINEERING.—The second half of the course E.E. 261. Included are rectifiers and filters, amplitude and frequency modulation, demodulation, microwave tubes, propagation of radio waves, antennas. Three class sessions and one three-hour laboratory. Prerequisite: E.E. 261. 4 s.h. (w)

MR. JENKINS

263-264. OPERATIONAL CIRCUIT ANALYSIS.—An advanced course covering the mathematical analysis of certain circuits used in electrical engineering, with an introduction to the application of operational calculus to circuit analysis. Prerequisites: E.E. 101-102, Mathematics 131, and permission of instructor. Elective for electrical majors. 6 s.h. (w) PROFESSOR SEELEY  
[Offered only upon sufficient demand; enrollment limited.]

## MECHANICAL ENGINEERING

PROFESSOR R. S. WILBUR, CHAIRMAN; ASSOCIATE PROFESSOR REED; ASSISTANT PROFESSORS FULTON AND KENYON; MESSRS. ELSEVIER, HOLLAND, RABIN, AND L. C. WILBUR

51. CONSTRUCTIVE PROCESSES.—Recitation course covering fundamentals of metallurgy and general processes of casting, forging, and machining. Demonstration or observation of basic machining operations is arranged when possible. Prerequisite: Chemistry 2. 3 s.h. (w) MESSRS. HOLLAND AND L. C. WILBUR

52. KINETICS-MECHANISM.—Motions of particles. Applications of Newton's *Laws of Motion* to motions of rigid bodies. Work, energy, impulse, and momentum. Linkage, cams, gears, trains of mechanism. Three recitations, three laboratory hours. Prerequisites: G.E. 2, G.E. 57, Mathematics 52. 4 s.h. (w)

ASSISTANT PROFESSOR FULTON, MESSRS. HOLLAND AND L. C. WILBUR

55. STEAM ENGINEERING.—Elementary principles of boilers, engines, turbines, and auxiliaries; properties of steam; fuels and combustion. Prerequisite: Chemistry 2. 2 s.h. (w) PROFESSOR R. S. WILBUR, ASSISTANT PROFESSOR KENYON

101-102. ENGINEERING THERMODYNAMICS.—A study of thermodynamic properties and processes of gases, vapor and gas-vapor mixtures; cycles; efficiencies and performance of steam power plant equipment. Three recitations. Prerequisites: Mathematics 52, Physics 52, M.E. 55. 6 s.h. (w)

PROFESSOR R. S. WILBUR, ASSISTANT PROFESSORS FULTON AND KENYON

103-104. HEAT POWER ENGINEERING.—A short course in engineering thermodynamics with applications to power plant design, for C. E. and E.E. students only. Three recitations. Prerequisites: Chemistry 2, Mathematics 52, Physics 52. 6 s.h. (w)

ASSOCIATE PROFESSOR REED, ASSISTANT PROFESSOR KENYON,  
AND MR. L. C. WILBUR



105. **FLUID MECHANICS.**—Fluid statics; kinematics of fluid flow; application of fluid dynamics theory to flow through orifices, weirs, and pipes; general principles of centrifugal pumps and turbines. Prerequisites: M.E. 52, Mathematics 52, Physics 52. 3 s.h. (w) ASSISTANT PROFESSOR KENYON AND MR. L. C. WILBUR

106. **HEAT TRANSFER.**—Conduction, radiation and convection; heat transfer to boiling liquids or condensing vapors; over-all transfer of heat, steady state or variable flow. Applications to heat power, heating and air conditioning, and refrigeration. Prerequisites: M.E. 101 or 103, M.E. 105 or G.E. 128, Mathematics 52. M.E. 102 or 104 concurrently. May be elected by limited number of C.E. and E.E. students. 3 s.h. (w)

ASSOCIATE PROFESSOR REED AND ASSISTANT PROFESSOR FULTON

108. **AERONAUTICS.**—A general course applying fluid mechanics principles to airfoils, propellers, and the complete airplane. Prerequisite: M.E. 105. 3 s.h. (w)

MR. ELSEVIER

113-114. **JUNIOR MECHANICAL ENGINEERING LABORATORY.**—Open only to mechanical engineering students. First semester, three laboratory hours, devoted to experiments and reports in hydraulics, flue gas analyses, calorific value of fuels. Second semester, six laboratory hours, devoted to experiments and reports related to thermodynamics, such as boiler inspection, air compression, injectors, steam and fuel calorimetry. Prerequisite: M.E. 55. M.E. 101-102 concurrently. 3 s.h. (w)

PROFESSOR R. S. WILBUR AND STAFF

115-116. **JUNIOR MECHANICAL ENGINEERING LABORATORY.**—Open only to electrical and civil engineering students. Experiments and reports on measuring instruments and apparatus, flow of air, steam and water, economy of boilers, steam and internal combustion engines. Three laboratory hours. M.E. 103-104 concurrently. 2 s.h. (w)

PROFESSOR R. S. WILBUR AND STAFF

150-151. **MACHINE DESIGN.**—Application of principles of mechanics, strength of materials, constructive processes and engineering drawing to the design of bolted, riveted and welded connections, pressure vessels and machine elements, followed by design of at least one complete machine. M.E. 150 has two recitations and three laboratory hours; M.E. 151 has two recitations and six laboratory hours. Prerequisites: G.E. 2, M.E. 52, G.E. 57, M.E. 51, G.E. 107. 7 s.h. (w)

MESSRS. HOLLAND AND L. C. WILBUR

153-154. **HEATING, AIR CONDITIONING AND REFRIGERATION.**—Determinations of heat losses and gains; design of steam, hot water and warm air heating and air conditioning systems; panel heating. Fundamentals of refrigeration theory and design. Applications of refrigeration to summer and year round air conditioning; commercial and industrial applications of refrigeration. Prerequisites: M.E. 102, M.E. 105, M.E. 106. M.E. 159-160 concurrently. Two recitations, three laboratory hours. 6 s.h. (w)

ASSOCIATE PROFESSOR REED AND MR. ELSEVIER

155. **INTERNAL COMBUSTION ENGINES.**—Principal cycles; fuels and fuel mixtures; effect of real mixtures on theoretical cycles; combustion; carburetion and fuel injection. Thermodynamic analysis of engine performance. Modern developments in the internal combustion engine. Three recitations. Prerequisite: M.E. 101-102. 3 s.h. (w)

ASSISTANT PROFESSOR FULTON AND MR. ELSEVIER

157. **CENTRIFUGAL PUMPS AND BLOWERS.**—A study of the basic principles of design, construction and application of centrifugal pumps and blowers. May be elected by a limited number of mechanical engineering seniors with consent of Chairman of Department. Prerequisite: M.E. 105. 3 s.h. (w)

ASSISTANT PROFESSOR FULTON

[Offered only upon sufficient demand; enrollment limited.]

158. **INDUSTRIAL ENGINEERING.**—A study of the industrial growth and present tendencies of productive industries as concerns the engineer. Specific topics treated are: plant location, organization, production and cost controls, wage payment, etc. *Seniors only.* Three recitations. 3 s.h. (w)

ASSISTANT PROFESSOR LEWIS AND MR. HOLLAND



159. SENIOR MECHANICAL ENGINEERING LABORATORY.—Tests and reports on performance and economy of internal combustion engines, steam engines and turbines; heat transfer, radiator tests, and energy balances. Required of all seniors in mechanical engineering. Six laboratory hours. Prerequisite: M.E. 114. M.E. 153 concurrently. 2 s.h. (w) PROFESSOR R. S. WILBUR AND STAFF

160. SENIOR MECHANICAL ENGINEERING LABORATORY.—Required of all seniors in mechanical engineering. Tests and reports on boiler, engine, turbine, condenser and accessories; heat transfer; refrigeration equipment. Six laboratory hours. Prerequisite: M.E. 159. M.E. 154 and M.E. 162 concurrently. 2 s.h. (w) PROFESSOR R. S. WILBUR AND STAFF

162. POWER PLANT CALCULATIONS.—Study of economic and engineering factors in developing steam power plants. Consideration of the performance of boilers, prime movers, condensers and various auxiliaries in various groupings as they affect the plant heat balance. May be elected by a limited number of C.E. or E.E. students. Three recitations. Prerequisite: M.E. 101-102 or 103-104. 3 s.h. (w) PROFESSOR R. S. WILBUR

164. ENGINEERING ANALYSIS.—A study of a series of engineering problems with particular reference to mathematical and graphical methods of solution and engineering interpretation of results. 3 s.h. (w) MR. L. C. WILBUR  
[Offered only upon sufficient demand; enrollment limited.]

166. AIR CONDITIONING DESIGN.—Analysis of air-conditioning requirements, summer and winter, commercial and industrial. Design of systems and units, and selection of equipment. Open to seniors who have completed M.E. 153. 3 s.h. (w) ASSOCIATE PROFESSOR REED  
[Offered only upon sufficient demand; enrollment limited.]

197-198. PROJECTS IN MECHANICAL ENGINEERING.—This course may be assigned by the Chairman of the Department to certain seniors who express a desire for such work and who have shown aptitude for research in one distinct field of mechanical engineering. Elective credit for either semester. 3-6 s.h. (w) PROFESSOR R. S. WILBUR AND STAFF

## GENERAL ENGINEERING

### STAFF

1. ENGINEERING DRAWING.—The study of mechanical drawing with emphasis on third angle projection, pictorial drawing, dimensioning, working drawings, pencil and ink techniques. 2 s.h. (w) STAFF

2. DESCRIPTIVE GEOMETRY.—A study of drawing board geometry with emphasis on line and plane problems, developments, and intersections. Further emphasis on drawing techniques. Prerequisite: G.E. 1. 2 s.h. (w) STAFF

57. STATICS.—Concurrent forces, parallel forces, nonconcurrent and nonparallel forces, centroids, friction, moment of inertia. Prerequisite: G.E. 1. G.E. 2. Mathematics 52 concurrent. 3 s.h. (w) STAFF

58. DYNAMICS.—Translation, rotation, work, energy, and momentum. Prerequisites: G.E. 57 and Mathematics 52. 3 s.h. (w) STAFF

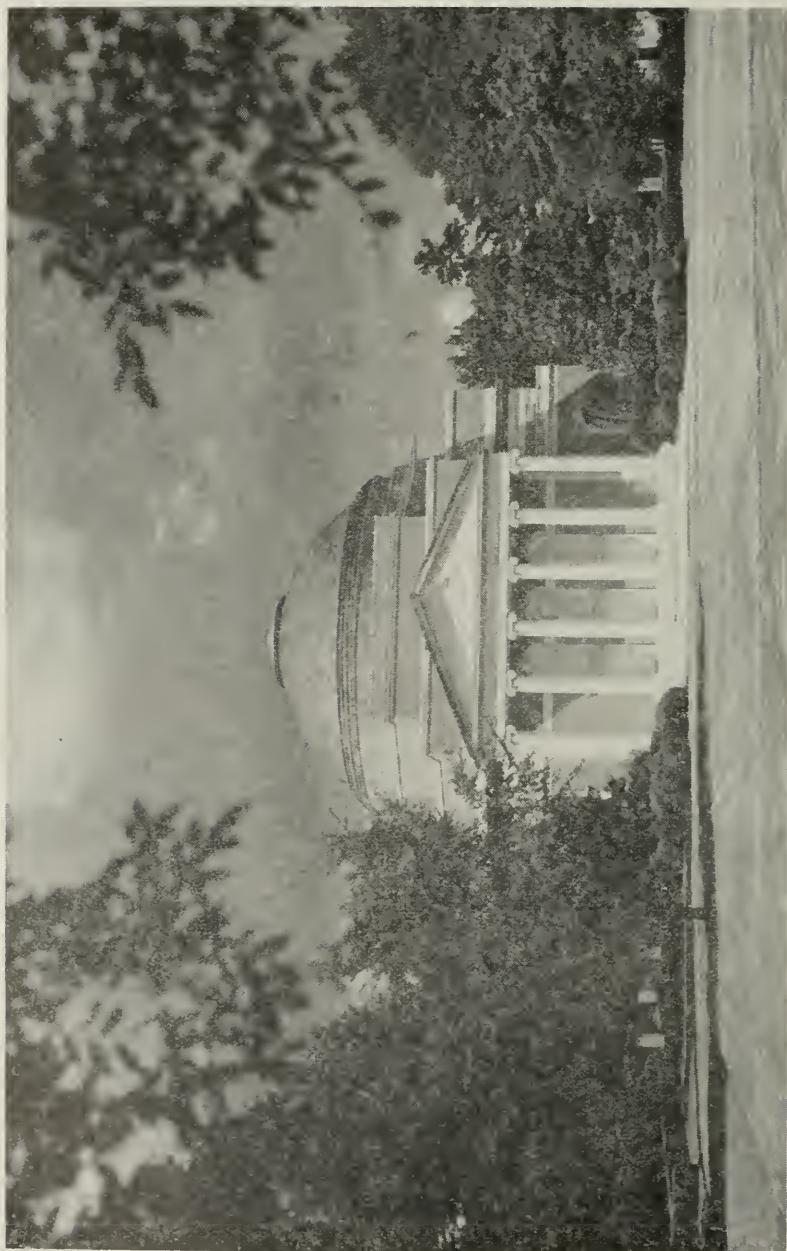
101. CONSTRUCTION METHODS.—Principles of scientific management as set forth by Gilbreth and Taylor; selection of materials and accumulation of cost data; use of modern equipment and methods; job design, description, selection and placement of personnel. Prerequisite: Junior standing. 3 s.h. (w) MR. WILDER  
[Offered only upon sufficient demand; enrollment limited.]

102. MOTION AND TIME STUDY.—Fundamentals of stop-watch time study; effort (tempo) rating; uses of time study, and relationships between time study, motion study, and wage incentives; micromotion study; motion economy principles and their applications; standard data—derivation and application. Prerequisite: Junior standing. 3 s.h. (w) MR. WILDER  
[Offered only upon sufficient demand; enrollment limited.]

107. STRENGTH OF MATERIALS.—Elastic bodies under stress; flexure of simple, overhanging, fixed, and continuous beams; columns; combined stresses, etc. For Civil Engineering students, the laboratory work is included in course C.E. 118. Other students should take course G.E. 109 for laboratory. Prerequisite: G.E. 57. 3 s.h. (w) STAFF

109. STRENGTH OF MATERIALS LABORATORY.—Concurrent with course G. E. 107. 1 s.h. Either semester. (w) STAFF

128. HYDRAULICS.—Hydrostatics; flow of water through orifices, weirs, pipes, and open channels; general principles of water wheels and turbines. Prerequisite: G.E. 57. 3 s.h. Either semester. (w) STAFF



THE WOMAN'S COLLEGE AUDITORIUM

# Student Life and Activities



**CONDUCT AND DISCIPLINE:** The University expects of its students loyal and hearty cooperation in developing and maintaining high standards of conduct as well as of scholarship. The University therefore reserves the right, and matriculation by the student is a concession of this right, to ask the withdrawal of any student whose conduct at any time is not satisfactory to the University, even though no specific charge be made against the student.

General oversight of the conduct of students and the administering of discipline are under the supervision of the Vice-President in the Division of Student Life. The duty of immediate supervision, guidance, and control of the students in each college is entrusted to the dean of that college. However, through the expressed willingness of the students of the University to assume the responsibility of maintaining high standards of morals and honor, the student body has properly become to a great degree self-governing. Two councils, one of men and the other of women, each composed of duly elected representatives of the student body, exercise the authority granted the students for their respective colleges to investigate all cases of misconduct, as well as all other cases of violation of proper student standards and traditions, and to make recommendations of penalties based on their findings.

The student councils have been helpful to the administrative authorities of the University. They exert a guiding and stimulating influence for the promotion of high ideals of conduct and of student relationships.

**ASSEMBLY AND CLASS MEETINGS:** The sophomore, junior and senior classes of Trinity College and the College of Engineering meet on call to discuss matters pertinent to the individual group. The freshman classes of these colleges hold weekly meetings with compulsory attendance.

In the Woman's College an assembly of all students is held on the first, second, and fifth Monday evenings; house meetings are held on third Monday evenings; and class meetings, with the exception of the freshman class, are held on fourth Monday evenings. The freshman meet as a class each week. In each instance, attendance is required.

**SCHOLASTIC REGULATIONS FOR PARTICIPATION IN ATHLETIC AND OTHER ACTIVITIES:** A student who receives

less than a passing grade on more than six hours of his required work of the preceding term is ineligible to represent the University in any athletic contest, concert, or other public event.

Members of athletic teams or other student groups engaging in public representation of the University are expected to be carrying their current work satisfactorily. A student may be barred from participation in such representation if, in the opinion of the dean, he fails to meet this requirement.

**RELIGIOUS LIFE:** "Eruditio et Religio," the motto emblazoned on the seal of the University, proclaims belief in the essential union of knowledge and religion in the educational process. Provisions, both academic and extra-curricular, are made for the realization of this aim. Academic offerings in the field of Religion are described elsewhere in this catalog. The description below concerns non-academic provisions.

The gothic Chapel stands at the center of the campus, an inspiring symbol of the place of religion in the well-balanced life. This is the home of Duke University Church, Interdenominational. The Church encourages the cultivation of the spiritual and moral life of students through participation in a program of varied activities.

The Service of Worship on Sunday morning has special appeal. Several hundred students participate in these services by singing in the choir, which has gained national reputation. At least one hundred other students assist in special ways, as ushers, collectors, and at communion services. Hundreds come to worship and are inspired by the beauty and challenge of these services.

But the Church also encourages the students to translate their worship into effective Christian living. A rich program of activities is offered, so that every student can find something that will challenge his interests and meet his needs as an active member of his faith.

These activities are developed along three lines: interfaith, interdenominational, and denominational. Protestant, Jewish, and Roman Catholic students are organized into their respective groups; but periodically they join together in interfaith programs which are carefully planned to respect the traditions of the various faiths. Interdenominational activities for all Protestant students are emphasized because it is believed that a more complete Christian faith is developed through sharing knowledge and fellowship with Christians of other churches.

Vital to the religious life at Duke are the various church groups known on the campus as the Protestant Denominational Groups. The Church looks to these organizations, under the leadership of their respective chaplains or advisers, to provide a continuing denominational experience through worship, study, service activities, and recrea-



tion. The promotion of churchmanship as a part of the total educational experience at Duke is designed to equip students to assume the role of leaders in their local church when they leave the University.

Additional features of the program are the organ recitals and special musical services which are given from time to time on Sunday afternoons in the Chapel. During the summer, Carillon recitals are presented twice a week.

The total religious program is under the direction of the Official Board of the Church, composed of an equal number of faculty-staff members and students. Professional guidance is given by the Preachers to the University, the Choir Director and the Organist, the Director of Religious Activities and the Director of Religious Activities in the Woman's College, and five denominational Chaplains.

**PUBLIC LECTURES AND SOCIAL FUNCTIONS:** The Faculty Council on Public Lectures supervises all public lectures, addresses, and other public events given under the auspices of the University or of any organization in any way connected with the University. All dates and programs must be approved by the Council, which prepares an official yearly calendar. Current announcements of public occasions appear in the Weekly Calendar of Duke University issued by the Department of Alumni Affairs.

A social committee composed of students and staff members from the three colleges exercises general supervision over major social functions. The executive officers of the committee are the Dean of Men and the Dean of Residence of the Woman's College.

**MEDICAL CARE:** With the exceptions noted below, full medical and surgical care is furnished to all regularly matriculated students of the University. The cost is included in the general fee paid each semester and in the medical fee charged each student in the summer quarter. The service is under the direction of the University Physician with the cooperation of the Staffs of the Infirmaries (one on each campus) and the University Hospital. It includes hospitalization (limited to thirty days), medical and surgical care, drugs, dressings, X-ray work, and ward, but not special, nursing. The student pays for his board while in the hospital. Refraction of eyes, treatment of teeth and of all chronic and pre-existing conditions, such as diseased tonsils, hernias, elective surgery, chronic skin conditions, endocrine disturbances, etc., and accidents or illnesses occurring during vacations or while off the campus, are not included in this service. The cost of any necessary braces and orthopaedic appliances, as well as of special nursing, must be borne by the student. If the student has insurance providing hospitalization, surgical, or medical benefits, the benefits shall be applied to the cost of his medical care.

A woman physician is in residence and a nurse in constant attendance at the Woman's College Infirmary. Patients in this Infirmary can be transferred to the Duke Hospital at any hour of the day or night. Male students receive ambulant care at the student health office in the hospital building during dispensary hours. Men are admitted to the hospital directly whenever necessary. The emergency service and the specialist consulting services of the Hospital and Medical School are always available.

The medical certificate required by the Committee on Admissions and sent to all prospective students gives advice as to certain types of medical and surgical care to be done by the home physician or surgeon prior to the departure of the student for college. The advice concerns such things as the giving of typhoid or smallpox vaccine, removal of diseased tonsils, correction of errors of refraction, repair of a hernia, or removal of a chronic appendix. Important time is frequently lost in correcting these conditions after entrance into college, and the cost of this work must be borne by the student.

When the student comes to the University, he is given a careful physical examination. Any physical defects are recorded along with the record of the questionnaire from the family physician. All students are requested to be successfully vaccinated against smallpox before admission to the University. It is urgently advised that they take typhoid vaccine if they have not done so within three years.

**PHYSICAL EDUCATION:** Students of Trinity College and the College of Engineering are required to engage in some type of physical activity for two years or four full semesters. This work consists of participation in natural, practical, physical activity for at least three one-hour periods each week. The purpose is to improve body control and strength through big muscle activities, to stimulate the development of mental and physical alertness, to establish habits of regular exercise, and to give training and experience in various kinds of recreational sports that will be indulged in after the student is graduated from the University.

Intramural sports are promoted and fostered in all phases of athletic activity. Meets, tournaments, and leagues are seasonally organized in the different sports. All students of the two colleges are eligible to enjoy the intramural privileges, provided they comply with the intramural rulings. Participation in these activities is entirely voluntary, but they are very popular because they provide an opportunity for every man to enter into competition and recreation in those sports which he enjoys most.

The work of the Physical Education Department of the Woman's College is designed in part to give the students of that college an appreciation of the value of activity for general physical well-being,

skill in one or more activities which can be enjoyed as recreation during and after college, a well-developed and well-coordinated body, and a knowledge of good posture and efficient handling of the body in everyday activities. To this end, students are allowed to choose from a large number of activities including individual, dual, and team sports, swimming, and several types of dancing. In order to insure a variety of skills, each student, during her three years of required physical education, must elect one semester's work in each of the following types of activity: individual or dual sports, and dance. All students who are unable to pass the swimming test must take one semester of swimming before graduation. In addition to the two hours per week of activity classes, all freshmen are required to take a course in orientation in physical education and body mechanics, meeting once a week during the first semester.

The Dance Group, the Swimming Club, and the Woman's Athletic Association give opportunities for all students to take part in the types of intramural activities most interesting to them. The swimming pool, tennis courts, and other athletic equipment are available to all students for use at specified times.

In order to meet certain hygienic aspects of physical education and intramural athletics, the University has made available for all students, in addition to facilities for physical activity and recreation, the following equipment and services:

1. (a) MEN. A regulation uniform: shirt, trunks, supporter, socks, sweat clothes, and towel.
- (b) WOMEN. Gym suit, dance costume, bathing suit, warm-up suit.
2. Provision for locker and handling of uniform.
3. The laundering of uniform and towel as needed.

The privileges and services listed above are available to all students who pay full fees, as long as they comply with the rules and regulations established for the care and handling of same.

**THE INTERCOLLEGIATE ATHLETIC PROGRAM:** The program, controlled entirely by the University, consists of the organization and training of representative freshman and varsity teams in football, basketball, baseball, track, cross country, swimming, lacrosse, wrestling, tennis, and golf.

The program is under the supervision of the Athletic Council, composed of seven members. Three of the seven are appointed from the faculty as follows: one member from the Officers of General Administration, one from the Officers of Educational Administration, division of the Colleges, and one from the Officers of Instruction of the undergraduate colleges. From this group the President of the University appoints the faculty chairman, who serves as chairman of the Athletic Council and of its executive committee.

Four of the seven members are selected from the alumni. One of

the four, a University Trustee, an alumnus, and a member of the Board's standing Committee on Physical Education and Athletics, is appointed not less frequently than every three years by the chairman of the Board of Trustees. The remaining three, who may not succeed themselves, are elected annually by the general Alumni Association for terms of three years. The Director of Alumni Affairs serves *ex officio* as secretary of the Council and of the executive committee.

The three faculty members of the Athletic Council constitute a committee which alone has the responsibility of enforcing the scholarship and athletic requirements of the University for participation in intercollegiate sports. The athletic eligibility rules are those of the Southern Conference.

The executive committee of the Athletic Council is composed of the faculty chairman of the Council, one other faculty member of the Council and one alumni member of the Council. The executive committee of the Council recommends to the President of the University persons to serve as Director of Athletics and as coaches in the various sports. The election of such persons, however, rests solely with the Board of Trustees of the University or with its Executive Committee on recommendation of the President of the University. The executive committee of the Council recommends to the Athletic Council athletic schedules and the award of insignia of merit earned by members of the athletic teams. However, decisions with respect to the same rest solely with the Athletic Council subject to approval of the President.

Each of the four undergraduate classes selects annually, for terms of one year, a member of each respective class to serve in an advisory capacity to the Athletic Council upon call of the faculty chairman on the matter of awarding insignia of merit.

All funds arising from athletics are handled entirely by the Treasurer of the University. An audit of the receipts and disbursements of these funds is made annually by the official auditors of the University and a report thereof made annually to the Executive Committee of the Board of Trustees.

**THE STUDENT ACTIVITIES OFFICES:** The Student Activities Offices were established for the purpose of assisting and coordinating the financial activities of the various student organizations in Trinity College, the College of Engineering, and the Woman's College.

The Offices provide for student organizations a banking service through the office of the Treasurer of the University. They also afford auditing services for organizations requiring it. Permanent records of all financial activities of organizations are kept under the supervision of the Offices. The Student Activities Offices, cooperating with the University Purchasing Department, also serve in the capacity of purchasing agent for affiliated student organizations. There is no charge for this service.



In addition to these specific services, the purpose of the Offices is to promote well-organized and effective extracurricular interest.

Student Activities Offices for Trinity College and the College of Engineering are located on the West Campus, and for the Woman's College, on the East Campus.

**STUDENT PUBLICATIONS:** Student publications of the University are under the control of a Publications Board, which is constituted as follows: three members from the University staff and two from the alumni, appointed by the President; six men from the junior and senior classes, elected by the students in Trinity College and the College of Engineering; four women from the junior and senior classes, elected by the students in the Woman's College; and four editors and four managers of student publications, *ex officio* members without voting power. No student publications can be started at the University without the approval of the Council.

The four publications of campus-wide interest are the *Archive* (monthly); the *Chanticleer* (annual); the *Chronicle* (weekly); and the *Duke 'n' Duchess* (monthly humor). The Engineering students issue a professional bimonthly magazine, the *DukEngineer*.

**STUDENT BROADCASTING SYSTEM:** The student broadcasting system of the University is under the control of a Radio Council, which is constituted as follows: two members from the University staff, appointed by the President; three members from the faculty who serve as engineering, production, and business advisers; three men from the junior and senior classes, including one engineer, elected by the students in Trinity College and the College of Engineering; one woman from either the junior or senior class, elected by the students of the Woman's College; one man from either the junior or senior class, elected by the members of the Student Legislature of the Men's Student Government Association from within the membership of that body; one woman from either the junior or senior class, elected by the members of the Woman's Student Government Association from within the membership of that body; and four student managers of the student broadcasting system, *ex officio* members without voting power.

**STUDENT ORGANIZATIONS:** The following organizations are active on the campus: *The Men's Association of Duke University* comprises all men students in Trinity College and the College of Engineering. Through its officers and a council it initiates policies and oversees matters within the control of the student body. The council is composed of nine members: three executive officers, two representatives from the senior class, two from the junior class, one from the sophomore class, and one from the College of Engineering.

*The Woman's Student Government Association* is similar in char-



acter to the men's association. Its council is composed of the officers of the Association, house presidents and president of the Town Girls' Club, class representatives, and chairman of the Freshman Advisory Council, *ex officio*.

*The Young Men's Christian Association* and the *Young Women's Christian Association* are branches of the national student Christian Associations. Each body aims to enrich not only the religious life of its members as individuals but also to promote religious group activity. These organizations carry on extensive activity in the fields of social service, faculty-student relations, forums, and other related projects. Membership in the Student Religious Council relates these organizations to the total religious activities program of the Duke University Church, Interdenominational.

Other organizations and activities include the following:

Bench and Bar Society (Pre-Legal Undergraduates); Class of 1951; Class of 1952; Class of 1953; Class of 1954; Classical Club (Men); Club Panamericano; Commodore Club (N.R.O.T.C. Social Organization); Debate Council (Men); Duke Independent Society (Men); Duke Masonic Club; Duke Players; Duke University Church (Interdenominational); Duke University Handbook and Directory; Duke University Steering Committee; Engineers' Club; G. O. Politan Club; Graduate Club; Hoof 'n' Horn; Interfraternity Council; Intramural Athletic Department; Men's Freshman Advisory Council; Pegram Chemistry Club; Pre-Medical Society; Publications Board; Quadrangle Pictures; Shoe and Slipper Club; Student Religious Council; Town Boys' Club; Town Girls' Club; Woman's College Student Forum; Women's Athletic Association; Women's Freshman Advisory Council; Women's Pan-Hellenic Council; Young Democrats Club; and the Campus Chest Fund.

The following honorary orders and fraternities have chapters on the campus: National—Alpha Kappa Psi (Economics); Chi Delta Phi (Literary); Delta Phi Alpha (German); Kappa Chi (Pre-Ministerial); Kappa Delta Pi (Educational); Omicron Delta Kappa (Leadership—Men); Phi Beta Kappa (Scholarship); Phi Eta Sigma (Freshman Scholarship—Men); Pi Mu Epsilon (Mathematics); Sigma Delta Pi (Spanish); Sigma Pi Sigma (Physics); Tau Kappa Alpha (Forensic); Tau Psi Omega (French); Theta Alpha Phi (Dramatic).

Local—Beta Omega Sigma (Leadership—Sophomore Men); Delta Phi Rho Alpha (Athletic—Women); Ivy (Scholarship—Freshmen Women); Mu Sigma (Psychology); Phi Kappa Delta (Leadership—Women); Red Friars (Leadership—Senior Men); Sandals (Leadership—Sophomore Women); Varsity "D" Club (Athletic—Men); White Duchy (Leadership—Senior Women).

Engineering (professional)—American Institute of Electrical Engi-

neers; the American Society of Civil Engineers; and the American Society of Mechanical Engineers. Engineering (Honorary)—Tau Beta Pi (National Honorary Engineering Fraternity); Pi Tau Sigma (Mechanical Engineering National Honorary Society); Order of St. Patrick (Leadership).

Local musical organizations available to qualified members are: Chamber Orchestra; Concert Band; Madrigal Singers; Marching Band; Men's Glee Club; Music Study Club; Symphony Orchestra; University Chapel Choir; Women's Glee Club.

The following national social fraternities have chapters on the campus: Alpha Tau Omega; Beta Theta Pi; Chi Phi; Delta Sigma Phi; Delta Tau Delta; Kappa Alpha; Kappa Sigma; Lambda Chi Alpha; Phi Delta Theta; Phi Kappa Psi; Phi Kappa Sigma; Pi Kappa Alpha; Ui Kappa Phi; Sigma Alpha Epsilon; Sigma Chi; Sigma Nu; Sigma Phi Epsilon; Theta Chi; Zeta Beta Tau.

The following national social sororities have chapters on the campus: Alpha Chi Omega; Alpha Delta Pi; Alpha Phi; Alpha Epsilon Phi; Delta Delta Delta; Delta Gamma; Kappa Alpha Theta; Kappa Delta; Kappa Kappa Gamma; Phi Mu; Pi Beta Phi; Sigma Kappa; Zeta Tau Alpha.

# Honors and Prizes



**HONORS:** To be eligible for Honors a student must earn, during the year, credit for at least the normal load of the college in which he is registered. All semester hours on which a student receives a grade are counted in the determination of Honors. Students in the freshman, sophomore, and junior classes who earn an average of at least two and one-half quality points per semester hours are given Honors.

The degree of Bachelor of Arts or of Bachelor of Science with distinction is conferred in accordance with the following rules:

To be eligible for general Honors at graduation a student must have completed in residence a minimum of ninety semester hours. Those students who earn an average of at least two and one-half quality points per semester hour are recommended for a degree *magna cum laude*. Those who earn an average of at least two and three-fourths quality points per semester hour are recommended for a degree *summa cum laude*.

**MEDALS AND PRIZES:** *The Wiley Gray Medal* was established by the late Robert T. Gray, Esq., of Raleigh, North Carolina, to be awarded annually in memory of his brother. It is given for the graduating oration that shall be, in the opinion of a committee, the best, with respect to both declaration and composition.

*The Debate Council* authorizes the awarding of medals to members of the graduating class who have represented the University in at least two intercollegiate debates. The medals are given by the local chapter of the Tau Kappa Alpha Fraternity.

*The Robert E. Lee Prize* is the gift of The Reverend A. W. Plyler, of the Class of 1892, and Mrs. Plyler. The sum of \$50 is awarded annually at Commencement, preferably to that member of the senior class who, in character and conduct, in scholarship and athletic achievement, in manly virtues and capacity for leadership, has most nearly realized the standards of the ideal student. The dean of the college, the Graduate Manager of Athletics, and the President of the Student Council constitute a committee to draft and adopt regulations governing the award.

*Alpha Kappa Psi Medallion.* Beta Eta Chapter of Alpha Kappa Psi, a professional fraternity in commerce, awards annually the Alpha Kappa Psi Scholarship Key to the male senior student pursuing a degree in the Department of Economics and Business Administration

who has attained the highest scholastic average for three years of collegiate work in this University.

*Medal of the North Carolina Association of Certified Public Accountants.* The North Carolina Association of Certified Public Accountants annually awards a medal to the senior who, in the judgment of his instructors, is the most outstanding student in accounting in his graduating class.

*Julia Dale Prize in Mathematics.* This is a prize of books given annually to the undergraduate who shows the greatest proficiency in the study of the calculus.

*The Milnrow Prize,* consisting of one year's subscription to the *Electrical World*, is awarded each year to that student from North or South Carolina graduating in the Department of Electrical Engineering who, in the opinion of the faculty of that department and as shown by his grades, has made the most progress in electrical engineering during his last year in college.

*The Tau Beta Pi Prize.* The North Carolina Gamma chapter of Tau Beta Pi, national honorary engineering fraternity, awards each year a suitable prize, such as an engineering handbook, to a sophomore student in engineering for outstanding scholastic achievement during the freshman year.

*The Phi Lambda Upsilon Prize.* Phi Lambda Upsilon, honorary chemical society, yearly awards a suitable prize to an outstanding junior who is majoring in chemistry. The recipient's name is inscribed on a plaque displayed in the Chemistry Library.

*The Pegram Chemistry Club Prize* is awarded in the spring of each year for scholarship in chemistry, physics, and mathematics. The prize consists of a one-year junior membership in the American Chemical Society and a one-year subscription to either the *Journal of the American Chemical Society* or *Industrial and Engineering Chemistry*. To qualify for this prize, the student must (1) be enrolled as an undergraduate of Duke University and (2) be taking or have taken a fourth-year chemistry course. The winner of this prize is selected by a committee consisting of at least one faculty member and at least two members of the Pegram Chemistry Club; the selection is based on the quality-point average for all courses taken in chemistry, physics, and mathematics. In case of a tie equal awards are given.

*The Sigma Xi Prize.* The Society of the Sigma Xi, honorary scientific society, is devoted to the encouragement of scientific research, and seeks to stimulate those who show promise of accomplishment in scientific research. As an encouragement to younger men and women the Duke Chapter of Sigma Xi has established the following prizes to be awarded annually to students resident at Duke University: \$20.00 for an undergraduate project or paper, \$20.00 for a Master's thesis or its equivalent, and \$40.00 for a Ph.D. dissertation or its

equivalent. Nominations, recommendations, copies of theses, reports or other material must be in the hands of the Secretary of the Chapter on or before May 5.

*The Erasmus Club Prize in the Humanities.* The Erasmus Club, founded in 1925, a group of Duke faculty members interested in research in language, literature, and the arts, seeks to stimulate interest and study in these fields. To encourage Duke students in this field, the Erasmus Club has established an annual prize, amounting to \$25.00, for the best original essay by an undergraduate which embodies the results of research, criticism, or evaluation in some subject in the humanities. Prospective competitors should consult some members of the faculty, preferably their major professor. Essays must be type-written and must be submitted to the president of the club before the first of April. The club reserves the right to withhold the prize in case there are no essays of acceptable quality.

*The Anne Flexner Memorial Award in Creative Writing* has been established by the friends of the family of Anne Flexner, who graduated from Duke in 1945. It consists of fifty dollars in cash and a book bearing the Anne Flexner Memorial Award bookplate. It is given annually for the best pieces of creative writing submitted by a Duke undergraduate. It is limited to short stories (5,000-word limit), one-act plays (5,000-word limit), poems (100-line limit), and informal essays (3,000-word limit). Only one manuscript may be submitted by a candidate, and manuscripts must be delivered to the English Office, Room 2G5, West Duke, before April 15.

*The William Senhauser Prize* is given by his mother in memory of her son, a member of the Class of 1942, who lost his life in the Pacific Theatre of War on August 4, 1944. The award is made annually to the sophomore or junior in Trinity College or the College of Engineering who has made the greatest contribution through participation and leadership in intramural sports. The winner of this prize is chosen by a committee selected by the President of the University.

*The Friends of Duke University Library* offer three prizes of \$25.00, \$15.00, and \$10.00, in an annual contest open to all undergraduate students for the best book collections acquired during their college years. The contest is supervised by the Undergraduate Committee of the Friends of the Library, which announces each fall the terms of the award. Inquiries may be directed to the Curator of Rare Books. Collections entered in the contest are exhibited each spring in the General Library, and the prizes are awarded on the basis of the student's collection and a personal interview to determine the overall planning and objectives of his collecting activity, and his familiarity with his own books and the general field of his collecting interest.



# Index

- Absences, 73
- Academic-Professional Combinations, 93
- Accountancy Courses, 111
- Activities, 175
- Administration, 13
  - Alumni Affairs, 15
  - Business Administration, 14
  - Educational Administration, 13
  - General Administration, 13
  - Public Relations, 15
- Admission, 50
  - Advanced Standing, 51
  - Application for, 52
  - By Certificate, 52
  - By Examination, 52
  - Freshman Class, 50
  - Procedure, 52
  - Readmission, 52
  - Requirements, 50, 51
  - Special Students, 52
- Advanced Standing, 51
- Aesthetics Courses, 96
- Air Force Reserve Corps, 78
- Air Science Courses, 102
- Alumni Affairs Officers, 15
- American Literature Courses, 121
- Angier Duke Regional Prizes, 61
- Anthropology Courses, 160
- Application for Admission, 52
- Appointments Office, 79
- Art Courses, 97
- Art and Music Officers, 44
- Assembly Meetings, 175
- Assistants, Instructional
  - Legal Aid Clinic, 43
  - Physical Education, Trinity College, 43
- Athletics
  - Athletic Council, 179
  - Intercollegiate, 179
  - Participation in, 175
- Attendance, 73
- Awards, 61
- Bachelor of Arts, Requirements, 83
  - General Program, 85
  - Major Field, 84
  - Specialized Programs, 85
- Bachelor of Science, Requirements, 88
- Bachelor of Science in Engineering, Requirements, 89
- Bachelor of Science in Nursing Education, Requirements, 92
- Boarding Accommodations, 68
- Botany Courses, 103
- Broadcasting System, 181
- Bureau of Testing and Guidance, 79
- Business Administration Courses, 111
- Business, Specialized Program in, 85
- Calendar of the Colleges, 7
- Chemistry Courses, 105
- Civil Engineering Courses, 166
  - Degree in, 89
- Class Meetings, 175
- Class Standing, 71
- Commerce and Industry Courses, 111
- Composition Deficiencies, 74
- Conduct, 175
- Corporation, University, 11
  - Executive Committee, 11
  - University Trustees, 11
- Course Cards, 70
- Course Load, 71
- Courses of Instruction, 96, 166
  - Accountancy, 111
  - Aesthetics, 96
  - Air Science, 102
  - American Literature, 121
  - Anthropology, 160
  - Art, 97
  - Botany, 103
  - Business Administration, 111
  - Chemistry, 105
  - Civil Engineering, 166
  - Commerce, 111
  - Drama, 121
  - Economics, 107
  - Education, 113
  - Electrical Engineering, 168
  - English, 120
  - English Literature, 121
  - Forest Botany, 105
  - Forestry, 125
  - French, 156
  - General Engineering, 172
  - Geology, 126
  - German, 127
  - Government, 128
  - Greek, 128
  - Health, 130
  - Health Education, 131, 133
  - History, 134
  - Latin, 139
  - Mathematics, 140

Mechanical Engineering, 170  
 Medical Science, 143  
 Music, 99  
 Naval Science, 143  
 Nursing Education, 118  
 Philosophy, 145  
 Physical Education, 130  
 Physics, 147  
 Political Science, 148  
 Psychology, 151  
 Religion, 154  
 Romance Languages, 156  
 Russian, 159  
 Sociology, 160  
 Spanish, 158  
 Speech, 121  
 Zoology, 164  
 Credit, 71  
 Degrees, Requirements for, 83  
   Academic-Professional Combinations, 93  
   Bachelor of Arts, 83  
   Bachelor of Science, 88  
   Bachelor of Science in Engineering, 89  
   Bachelor of Science in Nursing Education, 92  
 Dental School, Preparation for, 87  
 Dining Service, 68  
 Discipline, 175  
 Dismissal, 73  
 Divinity School Library Staff, 49  
 Dormitories, 66, 67  
 Drama Courses, 121  
 Economics Courses, 107  
 Education Courses, 113  
 Electrical Engineering Courses, 168  
   Degree in, 89, 90  
 Elementary School Teaching, 86  
 Emeriti, 12  
 Employment, 65  
 Engineering Courses, 166  
   Degree in, 89  
 English Courses, 120  
 English Literature Courses, 121  
 Examinations, 73  
 Examinations, Preliminary, 52  
 Executive Committee, University, 11  
 Expenses, 54  
 Fees, 53  
 Financial Information, 53  
 Forest Botany Courses, 105  
 Forestry Combination Course, 93  
 Forestry Courses, 125  
 Fraternities, 183  
 French Courses, 156  
 Freshman Class, Admission, 50

General Engineering Courses, 172  
 Geology Courses, 126  
 German Courses, 127  
 Government Courses, 128  
 Grade Reports, 73  
 Grades, 72  
 Graduate and Professional Schools, Officers, 14  
 Graduate School, Preparation for, 86  
 Greek Courses, 128  
 Guidance, Bureau of Testing and, 79

Health  
   Courses, 130  
   Officers, 45  
 Health Education Courses, 131, 133  
 High School Teaching, 86  
 History Courses, 134  
 Honoraries, 182  
 Honors, 184  
 Hours, Semester, 71

Intercollegiate Athletic Program, 179

Latin Courses, 139  
 Law Combination Course, 94  
 Law School Library Staff, 49  
 Law School, Preparation for, 87  
 Lectures, Public, 177  
 Legal Aid Clinic Staff, 43  
 Libraries, Staffs and Description, 46, 75  
   Departmental, 75  
   Divinity, 49, 75  
   Engineering, 75  
   Law, 49, 75  
   Medical, 49, 75  
   University, 46, 75  
   Woman's College, 48, 76  
 Living Accommodations  
   For Men, 66  
   For Women, 67  
 Loans, 62

Mathematics Courses, 140  
 Matriculation, 70  
 Mechanical Engineering Courses, 170  
   Degree in, 89, 91  
 Medals, 184  
 Medical Care, 177  
 Medical School Library Staff, 49  
 Medical School, Preparation for, 87  
 Medical Science Courses, 143  
 Musical Organizations, 183  
 Music and Art Officers, 44  
 Music Courses, 99

Naval Reserve Corps, 77  
 Naval Science Courses, 143  
 Nursing Combination Course, 95

- Nursing Education
  - Courses, 118
  - Degree in, 92
- Officers of Administration, 13
  - Alumni Affairs, 15
  - Business Administration, 14
  - Educational Administration, 13
  - General Administration, 13
  - Public Relations, 15
- Officers of Instruction, 16
  - Instructional Assistants, 43
  - Instructional Staff, 16
  - Part-time Instructors, 42
- Organizations, 181
- Orientation Program, 70
- Participation in Activities, 175
- Philosophy Courses, 145
- Physical Education
  - Courses, 130
  - Requirements, 178
- Physical Education and Student Health Officers, 45
- Physical Education Staff, Trinity College, 43
- Physics Courses, 147
- Political Science Courses, 148
- Preachers to the University, 44
- Prizes, 61, 184
- Psychology Courses, 151
- Publications, 181
- Public Lectures, 177
- Public Relations Officers, 15
- Quality Credit, 71
- Quantity Credit, 71
- Recreation Fees, 179
- Registration, 70
- Regulations, Academic, 70, 71
- Religion Courses, 154
- Religious Life
  - Program, 176
  - Staff, 44
- Religious Work, Specialized Program in, 85
- Reserve Officers Training Corps, 77
  - Air Force, 78
  - Naval, 77
- Residence Requirements, 72
- Residence Staff, 45
- Romance Languages Courses, 156
- ROTC's, 77
  - Air Force, 78
  - Naval, 77
- Russian Courses, 159
- Scholarships, 55
- Semester Hours, 71
- Social Functions, 177
- Social Work, Specialized Program in, 86
- Sociology Courses, 160
- Sororities, 183
- Spanish Courses, 158
- Special Students, 52
- Speech Courses, 121
- Student Activities Offices, 180
- Student Aid Program, 54
- Summer Session, 80
- Teaching, Specialized Program in, 86
- Testing and Guidance, Bureau of, 79
- Tests, Preliminary, 52
- Transcripts, 54
- Transfer Students, 51
- Trustees, 11
- Units of Admission, 50, 51
- University Press Staff, 44
- Woman's College Library Staff, 48
- Zoology Courses, 164









**BULLETIN**  
**OF**  
**DUKE UNIVERSITY**



**The School of Medicine**

**ANNOUNCEMENTS FOR 1951-1952**

**VOLUME 23**

**April, 1951**

**NUMBER 6-8**

# Annual Bulletins

For GENERAL BULLETIN OF DUKE UNIVERSITY, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF UNDERGRADUATE INSTRUCTION, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF THE COLLEGE OF ENGINEERING, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES, apply to *The Dean of the Graduate School*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF FORESTRY, apply to *The Dean of the School of Forestry*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF LAW, apply to *The Dean of the School of Law*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF MEDICINE, apply to *The Dean of the School of Medicine*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF NURSING, apply to *The Dean of the School of Nursing*, Duke University, Durham, N. C.

For BULLETIN OF THE DIVINITY SCHOOL, apply to *The Dean of the Divinity School*, Duke University, Durham, N. C.

For BULLETIN OF THE SUMMER SESSION, apply to *The Director of the Summer Session*, Duke University, Durham, N. C.

Published by Duke University monthly except in July, August, September, and December. Entered as second-class matter March 25, 1929, at the Post Office of Durham, North Carolina, under the Act of August 24, 1912.

BULLETIN  
OF  
DUKE UNIVERSITY  
THE SCHOOL OF MEDICINE



1951

ANNOUNCEMENTS FOR 1951-1952

DURHAM, NORTH CAROLINA  
1951

# Foreword



THIS bulletin is issued for prospective medical students. Admissions into any class are made only on the understanding that every decision of the Executive Committee shall apply to all students, even though it is made subsequently to their enrollment in the School. At frequent intervals the Executive Committee reviews the records of all students, and those whose progress has been unsatisfactory may be required to leave the School. ONLY THOSE WILL BE ADVANCED WHO, IN THE OPINION OF THE EXECUTIVE COMMITTEE, GIVE PROMISE OF BEING A CREDIT TO THEMSELVES AND TO THE SCHOOL. The next first-year class will be admitted October 1, 1951. For admission requirements and applications, see page 11.



# 1951

JANUARY	APRIL	JULY	OCTOBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
1 2 <b>3</b> 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 <b>2</b> 3 <b>4</b> 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	<b>1</b> 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
FEBRUARY	MAY	AUGUST	NOVEMBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 <b>4</b> 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 <b>23</b> 24 25 26 27 28 <b>29</b> 30
MARCH	JUNE	SEPTEMBER	DECEMBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
4 5 6 7 8 9 10 11 12 13 14 15 16 <b>17</b> 18 19 20 21 22 23 24 25 <b>26</b> <b>27</b> 28 29 30 31	1 2 3 <b>4</b> 5 6 7 8 <b>9</b> 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 <b>3</b> 4 5 6 7 8 9 10 11 12 13 14 <b>15</b> 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 4 5 6 7 8 9 10 11 12 13 14 <b>15</b> 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

# 1952

JANUARY	APRIL	JULY	OCTOBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
1 2 <b>3</b> 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 <b>14</b> 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 <b>4</b> 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
FEBRUARY	MAY	AUGUST	NOVEMBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 <b>20</b> 21 22 23 24 25 26 27 28 29 30
MARCH	JUNE	SEPTEMBER	DECEMBER
S M T W T F S	S M T W T F S	S M T W T F S	S M T W T F S
2 3 4 5 6 7 8 9 10 11 12 13 14 <b>15</b> 16 17 18 19 20 21 22 23 <b>24</b> 25 26 27 28 29 30 31	1 <b>2</b> 3 4 5 6 <b>7</b> 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 <b>30</b>	1 2 3 4 5 6 7 8 9 10 11 12 <b>13</b> 14 15 16 17 18 19 20 21 22 23 24 <b>25</b> 26 27 28 <b>29</b> 30	1 2 3 4 5 6 7 8 9 10 11 12 <b>13</b> 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

# School of Medicine Calendar

## 1951-1952



### 1951

Jan.	3	Tuesday—Registration of students, and Winter Quarter begins.
March	17*	Saturday—Winter Quarter ends.
March	26	Easter Monday: a holiday.
March	27	Tuesday—Registration of students, and Spring Quarter begins.
June	4	Monday—Commencement Exercises.
June	9	Saturday—Spring Quarter ends.
July	2	Monday—Registration of students, and Summer Quarter begins.
July	4	Wednesday—Independence Day: a holiday.
Sept.	3	Monday—Labor Day: a holiday.
Sept.	15	Saturday—Summer Quarter ends.
Oct.	1	Monday—Registration of students, and Autumn Quarter begins.
Nov.	29	Thursday—Thanksgiving: a holiday.
Dec.	15	Saturday—Autumn Quarter ends.

### 1952

Jan.	3	Thursday—Registration of students, and Winter Quarter begins.
March	15†	Saturday—Winter Quarter ends.
March	24	Monday—Registration of students, and Spring Quarter begins.
April	14	Easter Monday: a holiday.
June	2	Monday—Commencement Exercises.
June	7	Saturday—Spring Quarter ends.
June	30	Monday—Registration of students, and Summer Quarter begins.
July	4	Friday—Independence Day: a holiday.
Sept.	1	Monday—Labor Day: a holiday.
Sept.	13	Saturday—Summer Quarter ends.
Sept.	29	Monday—Registration of students, and Autumn Quarter begins.
Nov.	20	Thursday—Thanksgiving: a holiday.
Dec.	13	Saturday—Autumn Quarter ends.

\* First-year students do not have the holiday at the end of this quarter; instead they have a holiday from February 7-13, inclusive, 1951.

† First-year students do not have the holiday at the end of this quarter; instead they have a holiday from February 6-12, inclusive, 1952.

# General Statement



DUKE UNIVERSITY School of Medicine and Duke Hospital were established in 1930, through the munificent gift of the late James B. Duke. The School of Medicine has been planned to insure the greatest correlation between the various departments. These facilities are available also for students who are studying for degrees other than that of Doctor of Medicine. The School of Medicine has been approved as Class A by the American Medical Association and is also a member of the Association of the American Medical Colleges. On October 2, 1950, two hundred and ninety-six students were enrolled.

## *Aims of the School*

Duke University School of Medicine, from its beginning in 1930, has maintained as its major objectives: (a) the cultivation and teaching of medicine on a strictly scientific basis; (b) the correlation of medical research with medical teaching at all levels of its teaching, and (c) the continuous search for and experimentation with new or improved methods of teaching scientific medicine. In order to attain these objectives, the School has been organized, its physical plant planned, and its administrative structure constituted so that there exists the closest possible academic and physical relationship between undergraduate and graduate work in the University and the School of Medicine, and also between the basic medical sciences and the clinical sciences within the School and its integrated teaching Hospital. The professional staff of the School is composed of two general categories, those with permanent appointment and unlimited tenure, and those with temporary appointment. The latter, the much larger group, is maintained on a highly fluid basis, which makes possible a high degree of selectivity in appointment for academic training and scientific research. The smaller group of permanent appointees has in every individual a background characterized by academic and scientific attainment. The professional, academic, and scientific environment created by the staff is thus such as to engender scientific inquiry and to encourage diligent pursuit of the medical sciences in all their relationships. The staff at all levels devotes its entire professional time to the activities of the School or Hospital.

## *Facilities of the Hospital*

Duke Hospital, an integral part of Duke University School of Medicine, has every modern convenience for the diagnosis, proper care, welfare and comfort of the patients, both private and charity, white and colored, whether they come from Durham or from a distance. It has 579 beds, including 30 bassinets for newborn infants, and 20 premature nursery bassinets. *Medicine*, including dermatology and neurology, has 77 ward beds; *surgery*, including urology, otolaryngology, ophthalmology, and orthopaedics, 135 ward beds; *obstetrics*, including *gynecology*, 59, and 50 bassinets; *neuropsychiatry*, 9; and *pediatrics*, 40. There are 209 private rooms and semiprivate cubicles, 12 air-conditioned operating rooms, 4 obstetric delivery rooms, and ward and student laboratories. Offices and examining rooms for members of the Medical Faculty are located in the Hospital. The Hospital has been approved for internships and residences by the Council on Medical Education and Hospitals of the American Medical Association, and the American College of Surgeons.

Duke Hospital and its Out-Patient Clinic were opened for patients on July 21, 1930. Through December 31, 1950, 403,745 individuals have been examined, diagnosed, and treated. The average daily census of hospital patients during the past year was 465; 104,884 visits were made to the Out-Patient Clinic during the same period. Twenty-one per cent of the patients come from within a radius of twenty miles, the remaining 79 per cent come from the other 99 counties in North Carolina and from 36 other states and 3 foreign countries. The average distance traveled by the patients is more than seventy miles.

The Private Diagnostic Clinic was organized to co-ordinate the diagnostic studies, and to give better care to the complicated problems arising in the examinations of private patients. The Clinical Staff of Duke Hospital and School of Medicine forms the professional staff of this clinic, while the financial side is handled by a business manager. The offices and examining rooms are in Duke Hospital, and all of the laboratory and diagnostic facilities of the Hospital and School of Medicine are utilized by the Clinic.

## *Library*

JUDITH FARRAR, A.B., B.S., *Librarian*.

MILDRED PERKINS FARRAR, A.B., *Assistant Librarian*.

*"To study the phenomena of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all."*—SIR WILLIAM OSLER.

In addition to the General Library of Duke University and the departmental libraries of biology, chemistry, physics, etc., which have 965,000 volumes available for medical students, Duke Hospital Library

contains 50,500 volumes of American and foreign medical literature and subscribes to 575 current American and foreign medical and other scientific journals. These books and journals are available daily from 8:30 A.M. to 10:30 P.M. for the students, nurses, staff, and medical profession.

## *Medical Care*

ELBERT L. PERSONS, A.B., M.D., *Physician in Charge.*

With exceptions noted below, full medical and surgical care is furnished to all regularly matriculated medical students of the University who have paid the quarterly General Fee. This service is under the direction of the Physician in Charge with the co-operation of the Staff of Duke Hospital. It includes hospitalization (limited to thirty days), medical and surgical care, drugs, dressings, x-ray studies, and ward but not special nursing. A charge for board is made at the same rate as in the University dining halls. Refraction of eyes and treatment of teeth and of all chronic and pre-existing conditions, such as diseased tonsils, hernia, elective surgery, chronic skin conditions, endocrine disturbances, etc., or accidents or illnesses occurring during vacations or while off the campus are not included in this service. The cost of any necessary braces and orthopaedic appliances, as well as of special nursing, must be borne by the patient.

## *Student Government*

The members of the student body elect an Honor Council, in which each class is represented. It is the duty of the Honor Council to hear all cases involving breaches of conduct on the part of members of the student body. All new students entering the School are required to comply with this system of government.

## *Medical Military Science and Tactics*

The course consists of instruction in military medicine and military science and tactics. The student receives compensation during the last two years and while at a required summer encampment. Those completing the program will be offered reserve commissions in the Army Medical Corps or the Air Force Medical Corps and will be given priority in the selection of interns for military hospitals. Details of the program, eligibility, compensation, etc., may be obtained by addressing the PMS&T, Duke University School of Medicine.



# Curriculum of the School of Medicine



THE curriculum, shown below, consists of two semesters in the first year and three quarters each in the second, junior and senior years. There is no summer quarter between the first and second year, but in the two clinical years the subjects of the autumn, winter and spring terms are repeated in the summer quarter. This accelerated schedule is optional,\* and students may take the two semesters of their first year, and three quarters in each of their subsequent years, and receive their certificates in four calendar years, *or*, if they receive permission from the Curriculum Committee, they may at the end of their second year take the clinical quarters given during the summers and receive their certificates in three and one quarter calendar years.

Every effort is made to emphasize the close relationship of pre-clinical and clinical instruction. Members of the clinical staff assist in the teaching of preclinical subjects and demonstrate to the students of the first two years patients whose conditions illustrate the subjects being taught. Thus, from the student's first days, he is impressed with the interdependence of all branches of the medical science. In the junior and senior years, preclinical instructors assist the clinical staff in presenting the underlying basis of disease.

The free time in this curriculum may be spent in elective work or anything else the student wishes to do. No credits are given, but opportunity is provided for each student on his own initiative to obtain additional training which he may feel to be necessary or desirable. Elective courses have been organized for small groups, or the time may be utilized in independent work (including research) in any department, clinical or preclinical. Arrangements for taking such courses or doing other work are to be made through the Curriculum Committee.

It is hoped that many students will migrate to other medical schools for one or more quarters. Those who wish to do so, or to substitute a schedule different from that listed below, must have their programs approved in advance by the Curriculum Committee, and afterwards must present evidence that they have completed work comparable to that of the curriculum during the quarters in which they were away or were following an altered schedule.

\* See footnote on the next page.

## OPTIONAL ACCELERATED SCHEDULE\*

(The hours for these courses will be posted on the bulletin board.)

## FIRST YEAR

FIRST SEMESTER:		HOURS
October 2, 1950, to February 7, 1951.		
Anatomy (including histology and neuroanatomy) .....		638
SECOND SEMESTER:		
February 14 to June 9, 1951.		
Physiology .....		341
Biochemistry .....		279
Psychobiology .....		12
Free time .....		17

## SECOND YEAR

AUTUMN QUARTER (4th):		
October 2 to December 16, 1950.		
Pharmacology .....		143
Bacteriology .....		176
Parasitology .....		44
Public Health and Biostatistics .....		66
WINTER QUARTER (5th):		
January 2 to March 17, 1951.		
Pathology .....		231
Public Health .....		66
Introduction to Medicine and Surgery .....		132
SPRING QUARTER (6th):		
March 27 to June 9, 1951.		
Pathology .....		223
Introduction to Medicine .....		111
Clinical Microscopy .....		95

## JUNIOR YEAR

SUMMER QUARTER (7th):*		
July 2 to September 15, 1951.		
Medicine (Junior) .....		429
AUTUMN QUARTER (8th):*		
October 1 to December 15, 1951.		
Surgery (Junior) .....		429
WINTER QUARTER (9th):*		
January 3 to March 15, 1952.		
Obstetrics and Gynecology (Junior) .....		352
Neuropsychiatry .....		77

## SENIOR YEAR

SPRING QUARTER (10th):*		
March 24 to June 7, 1952.		
Medicine (Senior) .....		390
Free Time .....		39
SUMMER QUARTER (11th):*		
June 30 to September 13, 1952.		
Surgery (Senior) including urology and orthopaedics .....		390
Electives .....		39
AUTUMN QUARTER (12th):*		
September 29 to December 13, 1952.		
Pediatrics .....		297

\* This optional schedule may be made compulsory, and a thirteenth elective quarter may be added to the senior year.

\* The clinical instruction is repeated each quarter in order to utilize all the clinical material and to have small groups of students. Consequently, students may vary the order of the seventh, eighth, and ninth quarters, and also the order of the tenth, eleventh, and twelfth quarters. The above schedule merely illustrates the program of one group.

Surgery .....	41
Neuropsychiatry .....	41
Preventive Medicine .....	11
Electives .....	39

## SUMMARY

Total number of hours in curriculum .....	5,148
---	-------

## *Requirements for the Degree of Bachelor of Science in Medicine*

After the completion of six quarters in the Duke University School of Medicine, Duke University, on the recommendation of the Executive Committee, grants the degree of Bachelor of Science in Medicine to medical students who have completed creditable investigative work, prepared an acceptable report of the investigation, and passed an examination upon the subject of the investigation before an advisory committee. Students who elect to undertake work toward this degree must obtain written permission from the Executive Committee after approval of their program by the head of the department in which the work is to be done. No credit toward this degree is given for additional college work. All students in good standing are encouraged to undertake such investigative work as they may elect with the approval of the head of the department in which they wish to work. All requirements must be completed three months prior to the date on which the B.S. degree is requested.

## *Requirements for the Degree of Doctor of Medicine*

The degree of Doctor of Medicine is conferred on those who have completed, to the satisfaction of the Executive Committee, the twelve quarters of 11-12 weeks each of the curriculum of the School of Medicine, the preclinical and clinical examinations, and have signed an agreement that they will spend at least two years of the succeeding three years in hospital or laboratory work acceptable to the Executive Committee. As a guarantee of this pledge the diploma is deposited in the Treasurer's Office until after the completion of this training. Failure to fulfill this agreement constitutes a waiver of any claim to possession of the diploma and the degree of Doctor of Medicine.

# Admission



## *Application for Admission*

APPLICATION forms may be obtained by writing to the Committee on Admission, Duke University School of Medicine, Durham, N. C. A check or post office money order for \$5, payable to Duke University School of Medicine, must accompany each request for an application. This is not refundable. If further information is required after the Committee has studied the completed application, a personal interview with the Committee on Admission or a Regional Representative is arranged for the applicant. The candidate then is notified as soon as possible whether he has been accepted or declined; if accepted, he must send a deposit of \$50 within two weeks to insure enrollment. This money is applied toward the tuition. The next first-year class will be admitted October 1, 1951. Applications should be submitted by December 1st, of the preceding year. Due to the large number of applicants to all medical schools, candidates are advised to apply to at least four schools. The number of students in each class is limited to 76, but only those students will be accepted who give promise of being a credit to the School and the medical profession. Women are received on the same terms as men. In the event of vacancies, students from other medical schools may be considered for admission to any quarter for which their previous training has fitted them. Each application for advanced standing will be considered upon its own merits.

## *Requirements for Admission*

*"I request that great care and discrimination be exercised in admitting as students only those whose previous record shows a character, determination and application evincing a wholesome and real ambition for life."—JAMES B. DUKE.*

*Intelligence and character are the essential qualifications for admission.*

The minimum requirements for admission to this School include approved college credits of not less than ninety semester hours, which shall include adequate preparation in English, mathematics, physics, biology, and chemistry. This preparation should be obtained in college courses of one-year duration, except in English and chemistry. In those subjects, two years are recommended. The second year in English should be chiefly composition and theme writing. The first

year of chemistry should be general (inorganic), and the second, analytic and organic chemistry.

The premedical students should be aware of the importance of a well-rounded general education as a preparation for the study of medicine and not limit himself to scientific courses. He would be better advised to secure a knowledge of the principles and a thorough appreciation of the interrelations of the basic sciences than to accumulate credits in many courses. He should learn how to work independently, to observe critically, and to analyze, rather than simply store, the information presented. His choice of studies, beyond those required for admission, should be governed by his own chief interests and by the intellectual stimulus to be derived from the work. His major interest may be in any field, scientific or otherwise, and should provide an opportunity for the demonstration of his real ability. In general, he should avoid courses in subjects which are included in the medical curriculum.

The selection of students is based upon the quality rather than the quantity of preparation and upon demonstrated evidence of personal attributes of intelligence, character, and general fitness for the study and practice of medicine. In considering an applicant many sources of information may be consulted including (1) his curricular and extracurricular college record, (2) carefully prepared, confidential appraisals by teachers who know him personally, (3) his percentile rating on the Medical College Admission Test,\* and (4) the results of an interview with members of the Admission Committee or one of its Regional Representatives.

### REGIONAL REPRESENTATIVES OF THE COMMITTEE ON ADMISSION

Birmingham, Alabama.....	M. Y. DABNEY
Birmingham, Alabama.....	RAYMOND C. RAMAGE
Los Angeles, California.....	JEREMIAH W. KERNER
Pasadena, California.....	ROBERT H. PUDENZ
San Francisco, California.....	EMILE F. HOLMAN
San Francisco, California.....	CHARLES H. DANFORTH
Montreal, Canada.....	WILDER PENFIELD
Denver, Colorado.....	V. VERNON ALTVATER
New Haven, Connecticut.....	ALLEN K. POOLE
Jacksonville, Florida.....	EDWARD JELKS
Lakeland, Florida.....	CHARLES LARSEN, JR.
Atlanta, Georgia.....	JAMES E. PAULLIN
Atlanta, Georgia.....	E. B. DUNLAP, JR.
Savannah, Georgia.....	VICTOR H. BASSETT
Chicago, Illinois.....	GEORGE H. GARDNER
Iowa City, Iowa.....	ARTHUR L. BENTON
Iowa City, Iowa.....	PHILIP C. JEANS
Wichita, Kansas.....	THOMAS JAGER
Louisville, Kentucky.....	MALCOLM D. THOMPSON

\* This test is given at many of the colleges during the spring and autumn terms. If information is not available locally, it may be obtained from the Educational Testing Service, P.O. Box 592, Princeton, N. J.



Louisville, Kentucky.....	S. I. KORNHAUSER
New Orleans, Louisiana.....	PHILIP H. JONES, JR.
Baltimore, Maryland.....	JOHN T. KING, JR.
Baltimore, Maryland.....	GEORGE W. CORNER
Boston, Massachusetts.....	MARSHALL N. FULTON
Boston, Massachusetts.....	JAMES H. CURRENS
Rochester, Minnesota.....	W. H. HOLLINSHEAD
Kansas City, Missouri.....	RALPH H. MAJOR
St. Louis, Missouri.....	DORIS SURLS WOOLSEY
Butte, Montana.....	CAROLINE MCGILL
New York, New York.....	LAWRENCE S. KUBIE
New York, New York.....	BERTRAM J. SANGER
Rochester, New York.....	WILLIAM S. McCANN
Syracuse, New York.....	PHILIP P. ARMSTRONG
Cleveland, Ohio.....	B. S. KLINE
Columbus, Ohio.....	CHARLES A. DOAN
Dayton, Ohio.....	R. L. JOHNSTON
Toledo, Ohio.....	JOHN L. STIFEL
Oklahoma City, Oklahoma.....	WILLIAM M. TAYLOR
Tulsa, Oklahoma.....	JAMES W. KELLY
Portland, Oregon.....	KARL H. MARTZLOFF
Johnstown, Pennsylvania.....	W. FREDERIC MAYER
Palmerton, Pennsylvania.....	R. P. BATCHELOR
Pittsburgh, Pennsylvania.....	DAVENPORT HOOKER
Scranton, Pennsylvania.....	GEORGE A. CLARK
Charleston, South Carolina.....	EDWARD F. PARKER, JR.
Charleston, South Carolina.....	J. I. WARING
Columbia, South Carolina.....	WILLIAM WESTON
Columbia, South Carolina.....	JAMES H. GIBBS
Chattanooga, Tennessee.....	RICHARD VAN FLETCHER
Memphis, Tennessee.....	RAPHAEL E. SEMMES
Nashville, Tennessee.....	SAM L. CLARK
Sewanee, Tennessee.....	HENRY T. KIRBY-SMITH
Dallas, Texas.....	A. JAMES GILL
Galveston, Texas.....	A. E. HANSON
San Antonio, Texas.....	P. I. NIXON
Salt Lake City, Utah.....	ALFRED J. RIDGES
Charlottesville, Virginia.....	HENRY B. MULHOLLAND
Richmond, Virginia.....	I. A. BIGGER
Seattle, Washington.....	R. D. FORBES
Huntington, West Virginia.....	R. M. WYLIE
Madison, Wisconsin.....	WALTER E. SULLIVAN
Laramie, Wyoming.....	WILLIAM R. NESBITT*

\* On duty, U. S. Navy.

# Fees and Expenses



ALL FEES for each quarter are due and payable at the beginning of each quarter, and no student will be admitted to classes until these fees have been paid at the University Treasurer's Office. A fine of \$5.00 is charged for late registration. No credit will be given for any quarter in which the tuition of \$250 has not been paid at the Treasurer's Office, whether the work has been done here or elsewhere, except that students who have been permitted by the Curriculum Committee to spend a quarter at another medical school or hospital may subtract the amount of tuition paid at this other medical school or hospital from the \$250 due here for that quarter.

It is not advisable for a student to attempt outside work to defray his expenses; the results usually are disastrous to his health and academic standing.

## FEES AND EXPENSES

Tuition, per quarter .....	\$250		
General Fee, per quarter, including Health, Commencement, and Diploma Fees .....	7.50		
Athletic Fee, admitting student to all athletic contests held on the University campus, during the quarter (optional) .....	5.00		
		plus Federal tax	
Room-rent, per quarter* (estimated) .....	58.50		
Board, per quarter (estimated) .....	120	to	130
Laundry, per quarter (estimated) .....	10	to	20
Books, per quarter (estimated) .....	25	to	50
National Board of Medical Examiners, Fees† \$20 (Part I), \$15 (Part II)			
Microscope, ophthalmoscope, otoscope, and other equipment, which are required of each student and which must conform to rigid standards, may be obtained on a rental basis from the Univer- sity, per quarter .....	40	to	60
Estimated total expenses, per month .....	150	to	250

\* Rooms may be reserved by medical students in Few Quadrangle. These rooms are provided with furniture, heat, electric light, and care of rooms; each student furnishes his own blankets, sheets, pillow-slips, towels, and pillows. Applications for rooms, accompanied by a reservation fee of \$25, should be made by writing to Mr. W. E. Whitford, Duke University, Durham, N. C.

† Payable at the beginning of the quarter in which a student is eligible for the examination.

## *Angier B. Duke Memorial and Other Loan Funds*

The Angier B. Duke Memorial, Incorporated, administers through an advisory committee of the officers of the University a loan fund for students. In addition, the loan fund of the W. K. Kellogg Foundation is available for students who are not financially able to meet their expenses. Medical students, after their third quarter, may apply for loans from these sources. No scholarships are awarded in the School of Medicine. The loan funds are administered in accordance with the following regulations:

1. No loan will be made to a student who violates any of the regulations of the University or who is not doing outstanding classwork.
2. Loans will be made only to students who are taking full courses of study that lead to a degree, and all loans must be arranged not later than one week after the beginning of a quarter.
3. Every applicant for a loan must present with the application such security as the President of the University may approve, and no money will be advanced before a note with approved security is in the hands of the Treasurer of the University.

## *Frederic M. Hanes Fellowships*

Starting July 1, 1947, any Duke medical student after his first year is eligible for a leave of absence and a Fellowship of \$125 per month for full-time research work at Duke with special emphasis in a pre-clinical subject. These Fellowships will be granted on the recommendation of the Executive Committee, for a period of six months, but may be renewed. Information may be obtained from Dr. D. T. Smith.

## *Awards to Medical Students and Interns*

(Additional information may be obtained from the Dean's Office.)

## *Borden Undergraduate Research Award in Medicine*

An award of \$500 may be given to the Duke Senior who, in the opinion of the Executive Committee, has performed the best research work during his or her entire medical course, including that done during the preclinical years, and theses for the B.S. degree in Medicine. *Applicants should submit their papers, articles or reprints to the Dean at least three months prior to expected date of graduation.*

### *Bagby Award in Pediatrics*

The best Duke Pediatric Intern is eligible for a subscription to the *American Journal of the Diseases of Children*.

### *Mosby Awards*

One-year subscriptions to the *Journal of Pediatrics*, *American Journal of Obstetrics and Gynecology*, the *American Heart Journal*, *Surgery*, *American Journal of Syphilis*, *Gonorrhea*, and *Venereal Diseases*, *Journal of Allergy*, *Journal of Thoracic Surgery*, and *Journal of Laboratory and Clinical Medicine* may be awarded to the best seniors in pediatrics, obstetrics, medicine, surgery, urology, allergy, thoracic surgery and clinical microscopy, respectively.

# Departments of Instruction



## *Anatomy*

JOSEPH ELDRIDGE MARKEE, B.S., Ph.D., *Professor of Anatomy and Chairman of the Department.*

B.S. and Ph.D., Chicago, 1925 and 1929; Douglas Smith Fellow in Anat., 1929; Instr. in Anat., Chicago, 1929; Research Fell., Gen. Ed. Bd., Carnegie Lab. of Embry., Balto., 1935-1936; Visiting Prof. of Anat., Univ. of Tenn., 1942; Instr., Ass't. Prof., Assoc. Prof. and Prof. of Anat., Stanford, 1929-1943; 1943—

DUNCAN CHARTERIS HETHERINGTON, A.B., M.A., Ph.D., M.D., *Professor of Anatomy.*  
A.B., Colorado Coll., 1919; M.A. and Ph.D., Illinois, 1920 and 1922; M.D., Johns Hopkins, 1926; Instr. in Anat., Vanderbilt Med. Sch., 1926-1930; Associate Prof. of Anat., Duke, 1930-1945; 1930—

JOHN WENDELL EVERETT, A.B., Ph.D., *Professor of Anatomy.*

A.B., Olivet, 1928; Ph.D., Yale, 1932; Instr. in Biol., Goucher, 1930-1931; Ass't. Prof. of Anat., Duke, 1932-1946; 1932—

TALMAGE LEE PEELE, A.B., M.D., *Associate Professor of Anatomy and Assistant Professor of Medicine.*

A.B. and M.D., Duke, 1929 and 1934; Ass't. in Anat., Duke Med. Sch., 1931-1934; Int. and Ass't. Res. in Med., Duke Hosp., 1934-1936; Int. and Res. in Neurol., Bellevue Hosp., New York City, 1936-1937; Fellow in Anat., Johns Hopkins Med. Sch., 1937-1938; Instr. in Anat., Rochester Med. Sch., 1938-1939; Visiting Ass't. Prof. Neurol., Instit. Neurol., Northwestern Univ. Med. Sch., 1945; 1939—

CHARLES HENRY SAWYER, A.B., Ph.D., *Professor of Anatomy.*

A.B., Middlebury, 1937; Ph.D., Yale, 1941; Ass't. in Biol., Middlebury, 1936-1937; Ass't. in Zool., Yale, 1938-1941; Instr. in Anat., Stanford, 1941-1943; Visiting Ass't. Prof. of Zool., Yale, 1946 (summer); 1944—

KENNETH LINDSAY DUKE, A.B., Ph.D., *Associate Professor of Anatomy.*

A.B., Brigham Young, 1936; Ph.D., Duke, 1940; Grad. Ass't. in Zool., Brigham Young Univ., 1936-1937; Grad. Ass't. in Zool., 1937-1939, and Fellow in Zool., Duke, 1939-1940; Visiting Instr. in Anat., U. of Missouri, 1944; Visiting Ass't. Prof. of Anat., U. of Tenn. Sch. of Med., 1949; Assoc. in Anat., Duke, 1940-1946; 1940—

GEORGE JAY BAYLIN, A.B., M.D., *Professor of Radiology and Associate in Anatomy.*

The required courses of instruction in gross human anatomy, histology, and neurology are scheduled for five and one-half days a week for a period of eighteen weeks during the first semester of the first year. Emphasis is placed upon the study of material in the laboratory. In an attempt to utilize more fully the laboratory time, visual educational methods are employed as fully as possible. These techniques consist of colored motion pictures of demonstration dissections, colored lantern slides, and motion pictures, both embryological and neurological. All of the instruction is designed to be as informal and as nearly individual as possible. General principles and the functional viewpoint of living anatomy are stressed in the hope that the student may be stimulated to secure a working knowledge of anatomy in the broadest sense. Whenever possible, fresh tissues and living cells are made available for examination, and clinical cases exemplifying



anatomical principles are studied whenever they are available at appropriate times. Through the co-operation of the Department of Radiology, the students are given an opportunity to study portions of the living human body as revealed by the fluoroscope and roentgenograph. The following elective courses are offered:

*Demonstrations in Anatomy.* Using dissections already prepared, weekly demonstrations of selected regions or systems are made by the members of the group. Sixth quarter—Two hours per week by arrangement. Second-year students in groups of 10.

*Review in Anatomy.* During the sixth quarter, a review in anatomy will be presented by the visual education methods outlined above, covering gross and neuro-anatomy, and histology.

*Special Neuro-anatomy.* Laboratory work and conferences upon selected portions of the human central nervous system. Limited to 6 junior or senior students. Two hours weekly by arrangement.

*Brain Modeling.* Free-hand reconstruction in clay, from gross and sectioned material, of the chief tracts and nuclei of the human brain stem. By arrangement—4 to 10 students.

*Experimental Neurology.* An operative and laboratory study of the effect of various lesions upon the central and peripheral portions of the nervous system. 4 to 8 junior and senior students by arrangement. Prerequisite—operative surgery.

*Advanced Studies in Anatomy.* These may be arranged at any time under the direction of the various members of the staff.

*Review for Orthopaedic Anatomy.* A one hour weekly review of the anatomy related to orthopaedic surgery.

*Review for Surgical Anatomy.* A one hour weekly review of the anatomy related to general surgery.

## *Biochemistry*

PHILIP HANDLER, B.S., M.S., Ph.D., *Professor of Biochemistry and Nutrition and Chairman of the Department; Director, Atomic Energy Commission Fellowship Training Program, Duke.*

B.S., Coll. of City of New York, 1936; M.S. and Ph.D., Illinois, 1937 and 1939; *Biochemist, Duke Hospital, 1939—*

HAYWOOD MAURICE TAYLOR, B.S., M.S., Ph.D., *Professor of Toxicology and Associate Professor of Biochemistry.*

B.S., M.S., and Ph.D., North Carolina, 1920, 1921 and 1924; Instr. in Chem. and Pharmaceut. Chem., North Carolina, 1920-1925; Research Chemist, E. R. Squibb and Sons, and Fisk Rubber Co., 1925-1928; Instr. in Ophthalmol., and Chemist to Wilmer Institute, Johns Hopkins Hosp., 1928-1930; Visiting Fellow in Forensic Med., New York Univ., 1934; *Associate Biochemist and Toxicologist, Duke Hospital, 1930—*

JEROME SYLVAN HARRIS, A.B., M.D., *Professor of Pediatrics and Associate Professor of Biochemistry.*

MARY LILIAS CHRISTIAN BERNHEIM, B.A., M.A., Ph.D., *Associate Professor of Biochemistry.*

B.A., M.A., and Ph.D., Cambridge, 1925, 1927, and 1929; Fellow, Newnham, 1927-1930; 1930—

GEORGE WILLIAM SCHWERT, JR., B.A., Ph.D., *Assistant Professor of Biochemistry*.  
B.A., Carlton Coll., 1940; Ph.D., Univ. of Minn., 1943; Instr. and Res. Assoc. in Biochem., Duke, 1946-1948; Markle Foundation Scholar in Med. Sciences, 1949; 1946—

WILFRIED F. H. M. MOMMAERTS, B.A., M.A., Ph.D., *Lecturer in Biochemistry and Established Investigator of the American Heart Association*.  
B.A., M.A., Leiden, Holland, 1937, 1939; Ph.D., Kolozvar, 1943; Visiting Assoc. Prof. Biochem., Adj. Prof. Biochem., Assoc. Prof. of Physiol., American Univ. of Beirut, 1945-1948; 1948—

HENRY KAMIN, B.S., Ph.D., *Instructor in Biochemistry*.  
B.S., Coll. of City of N. Y., 1940; Ph.D., Duke, 1948; Res. Ass't. in Biochem., Duke, 1940-1949; 1940—

## FELLOWS

DAVID V. COHN, B.S., *Atomic Energy Commission Fellow in Biochemistry*.  
B.S., Coll. of City of N. Y., 1948; A.E.C. Pre-doctoral Fellow, Biochem., Duke, 1949; 1948—

ARTHUR F. DRATZ, B.S., *U. S. Public Health Service Fellow in Biochemistry*.  
B.S., Duke, 1947; 1948—

MURRAY HEIMBERG, B.S., M.S., *U. S. Public Health Service Fellow in Biochemistry*.  
B.S., M.S., Cornell Univ., 1948, 1949; 1949—

ROBERT G. PARRISH, B.S., *U. S. Public Health Service Fellow in Biochemistry*.  
B.S., Univ. of Wisc., 1949; 1949—

## ASSISTANTS

FLORAPEARL ARMSTRONG, B.S., *Research Assistant in Biochemistry*.  
B.S., Univ. of Chattanooga, 1949; 1949—

ANDREW J. GLAID, A.B., M.S., *Research Assistant in Biochemistry*.  
A.B., M.S., Duquesne Univ., 1949, 1950; 1950—

IRVING GREEN, A.B., *Research Assistant in Biochemistry*.  
A.B., New York Univ., 1950; 1950—

MAIRE T. HAKALA, M.S., *Research Assistant in Biochemistry*.  
M.S., Univ. of Helsinki, 1947; 1950—

IRWIN G. LFDER, A.B., M.S., *Research Assistant in Biochemistry*.  
A.B., Brooklyn Coll., 1942; M.S., N. Y. Univ., 1947; 1947—

JOSEPH C. RUPP, A.B.  
A.B., Muhlenburg, 1950; 1950—

The required course in general biochemistry for first-year students is given over a period of eighteen weeks during the second semester. Two lectures, four laboratory periods, and one conference period per week are devoted first to the correlation of the fundamental facts and theories of physical and organic chemistry of proteins, fats, and carbohydrates with the chemistry of living organisms; followed by an intensive study of the chemical aspects of the processes of digestion, absorption, circulation and respiration, acid-base and salt equilibrium, intermediary and over-all metabolism. Each student carries out on himself a fairly complete metabolism balance study involving quantitative analyses of blood and urine.

Since the success of the students in this course is largely determined by the adequacy and ready availability of their premedical training, it is urged that all students review the fundamental laws, theories, and facts of chemistry before the beginning of the course. A circular outlining the topics requiring special attention is sent to all students upon admission. Additional copies of the circular may be obtained from

the Dean's Office. An examination to test the state of preparation of the student is given in the beginning of the course in biochemistry.

*Biochemical Research.* The facilities of the department, including various types of research equipment and the clinical material of the blood chemistry laboratory, are available to properly qualified students for independent or supervised investigations. Chemical investigations of problems in biochemistry or in conjunction with the clinical and pathological departments may be carried on.

*Seminar in Toxicology.* A round-table discussion of the homicidal, suicidal and industrial poisons, alcoholism, etc., by arrangement.

*Laboratory Detection of Common Poisons.* A laboratory course in the properties, detection, and identification of the common poisons. Consideration is given to the types of material to be examined, legal precautions to be taken and interpretation of the findings, by arrangement.

*Chemistry of Proteins, Enzymes, and Viruses.* A two-hour seminar is given weekly throughout the Autumn, Winter, and Spring Quarters.

*Physical Biochemistry.* A two-hour lecture course with demonstrations, given weekly in Autumn and Winter Quarters. Given alternately with *Chemistry of Proteins, Enzymes and Viruses*.

*Intermediary Metabolism.* A two-hour lecture course and seminar conducted during Autumn, Winter and Spring Quarters. Given alternately with *Seminar in Nutrition*.

*Advanced Seminar in Nutrition.* A two-hour lecture and seminar course in modern nutritional concepts. Given alternately with *Intermediary Metabolism*.

*Biochemistry of Disease.* A seminar course meeting once weekly to discuss etiology and pathogenesis of metabolic diseases from the biochemical viewpoint. Given in alternate years in the Spring Quarter.

## *Physiology and Pharmacology*

FRANK GREGORY HALL, B.A., M.A., Ph.D., *Professor of Physiology and Chairman of the Department.*

B.A., Milton, 1917; M.A. and Ph.D., Wisconsin, 1921 and 1923; Prof. of Biol., Milton, 1923-1926; Assoc. Prof. and Prof. of Zool., Duke Univ., 1926-1942; Lt. Col., Chief, Physiol. Branch, Army Air Forces, 1942-1945; 1945—

GEORGE SHARP EADIE, M.A., M.B., Ph.D., *Professor of Physiology and Pharmacology.*

M.A. and M.B., Toronto, 1923 and 1921; Ph.D., Cambridge, 1927; Rotat. Int., Toronto Gen. Hospital, 1921-1922; Demonstrator in Biochem., Toronto, 1923-1925; Ass't. in Physiol., Dalhousie, 1927-1928; Assoc. in Physiol., Johns Hopkins Med. Sch., 1928-1930; 1930—

FREDERICK BERNHEIM, A.B., Ph.D., *Professor of Pharmacology.*

A.B., Harvard, 1925; Ph.D., Cambridge, 1928; Nat'l Research Council Fellow, Johns Hopkins Med. Sch., Dept. of Physiol. Chem., 1929-1930; 1930—

FORST DRAPER MCCREA, B.S., M.S., Ph.D., *Associate Professor of Physiology and Pharmacology.*

B.S., Purdue, 1918; M.S., Illinois, 1923; Ph.D., Wisconsin, 1927; Instr. in Physiol., Illinois, 1920-1923; Instr. in Physiol., Wisconsin Med. Sch., 1923-1927; Ass't. Prof. of Physiol. and Pharmacol., Georgia Med. Sch., 1927-1929; Sr. Instr. in Physiol., Western Reserve Med. Sch., 1929-1930; 1930—

KENNETH EARL PENROD, B.S., Ph.D., *Associate Professor of Physiology and Pharmacology.*

B.S., Miami Univ., 1938; Ph.D., Iowa State Coll., 1942; Instr. in Physiology, Miami Univ., 1940-1941; Army Air Forces, 1942-1946; Ass't. Prof. in Physiology, Iowa State Coll., 1946; Ass't. Prof. of Physiology, Boston Univ., 1946-1950; 1950—

MACDONALD DICK, B.A., M.A., M.D., *Assistant Professor of Physiology and Pharmacology, and Associate in Medicine.*

B.A. and M.A., Virginia, 1922 and 1923; M.D., Johns Hopkins, 1928; Int. and Ass't. Res., Vanderbilt Univ. Hosp., 1928-1930; Ass't. in Path. and Bact., Rockefeller Instit., 1930-1932; *Assistant Physician, Duke Hospital, 1932—*

WILLIAM ERNEST DETURK, B.A., M.A., Ph.D., M.D., *Assistant Professor of Pharmacology.*

B.A., Illinois, 1937; M.A., Illinois, 1938; Ph.D., Duke, 1940; M.D., Vanderbilt, 1948; Instructor in Biology, Vanderbilt, 1940-1943; Res. Associate, Vanderbilt, 1943-1947; Intern, Vanderbilt Univ. Hosp., 1948-1949; 1949—

FRANK LIBMAN ENGEL, A.B., M.D., *Associate Professor of Medicine, and Associate in Physiology.*

MARSHALL N. BRUCER, *Lecturer in Physiology.*

The course in medical physiology for first-year students is given over a period of eighteen weeks during the second semester. There are lectures, laboratories, and conferences each week in which are presented the general principles of human physiology and their general application to the practice of medicine. This course runs parallel to biochemistry.

The course in pharmacology is given in the first quarter of the second year. Lectures, laboratories, and conferences deal with the mode of action of drugs in terms of biochemical and physiological processes.

Physiological and Pharmacological Research: The facilities of the department include modern types of research equipment. There are special facilities for research in the field of respiration; circulation; and cellular metabolism. Properly qualified students are permitted to undertake original research in physiology and pharmacology under direction of various members of the staff.

Seminars: Seminars in special fields of physiology are offered to graduate students by various members of the staff.

## *Bacteriology, Immunology, and Mycology*

DAVID TILLERSON SMITH, A.B., M.D., *Professor of Bacteriology, Chairman of the Department, and Associate Professor of Medicine.*

A.B., Furman, 1918; M.D., Johns Hopkins, 1922; Int. in Ped., Johns Hopkins Hosp., 1922-1923; Ass't. in Path. and Bact., Rockefeller Instit., 1923-1924; Bacteriologist, Pathologist and Director, Research Laboratory of N. Y. State Hosp. for Tuberculosis, Raybrook, 1924-1930; *Bacteriologist and Associate Physician, Duke Hospital, 1930—*

NORMAN FRANCIS CONANT, B.S., A.M., Ph.D., *Professor of Mycology and Associate Professor of Bacteriology.*

B.S., Bates, 1930; A.M. and Ph.D., Harvard, 1931 and 1933; Research Fellow, Laboratoire de Parasitologie, Fac. de Medicine, Paris, 1933-1934; Research Ass't., Harvard Med. Sch. and Mass. Gen'l. Hosp., Jan. 1 to Oct. 1, 1935; Assoc. Prof. of Bacteriology and Mycology, 1935-1946; *Mycologist, Duke Hospital, 1946—*

SAMUEL PRESTON MARTIN, A.B., M.D., *Associate in Bacteriology and Medicine.*



JOSEPH W. BEARD, B.S., M.D., *Associate Professor of Virology and Professor of Surgery.*

\*HARVEY GRANT TAYLOR, A.B., A.M., M.D., *Associate Professor of Bacteriology and Pediatrics, and Assistant Dean.*

MARY ALVERTA POSTON, A.M., *Instructor in Bacteriology.*

A.M., Duke, 1939; Ass't. in Biol. Lab., Johns Hopkins Hosp., 1922-1930; *Assistant Bacteriologist, Duke Hospital, 1930—*

HILDA POPE, A.B., A.M., Ph.D., *Associate in Bacteriology.*

A.B., Ga. State Coll. for Women, 1944; A.M., Ph.D., Duke, 1946, 1949; *Assistant Bacteriologist, Duke Hospital, 1948—*

HEINZ KARRER, M.D., *Instructor in Bacteriology.*

M.D., Zurich, 1947; Hooper Foundation, 1947-1949; Int., John Sealy Hosp., 1949-1950; 1950—

H. W. CRAIG, *Technical Instructor.*

*Bacteriology, Immunology, and Mycology.* The required course is given in the fourth quarter. An intensive study is made of the common bacteria, fungi, and viruses which cause disease in man. The scope of the laboratory course is reasonably wide and acquaints the student with all the methods and procedures employed in bacteriological laboratories. Most of the lecture time is devoted to the immunological and epidemiological aspects of infection. The instruction is designed to give the students a clear conception of: (1) how organisms gain entrance to the body, (2) the type of poisons which they produce, (3) the nature of immune bodies which are produced by the host, and (4) the methods of preventing the disease by active and passive immunization.

*Research Bacteriology.* Opportunities for original investigations are afforded a few specially qualified students.

*Clinical Bacteriology.* During their clinical clerkships on medicine (one quarter each for junior and senior classes), the students may perform the routine and special bacteriological work for the patients assigned to them on the teaching service, under the direction of the Department of Bacteriology and in parallel with the Biological Division of the medical clinic.

## *Pathology*

WILEY DAVIS FORBUS, A.B., M.D., *Professor of Pathology and Chairman of the Department.*

A.B., Washington and Lee, 1916; M.D., Johns Hopkins, 1923; Res. and Assoc. Pathologist, Johns Hopkins Hosp., 1926-1927 and 1929-1930; Guest Ass't. Pathol. Instr., Ludwig Maximilian's Univ., Munich, 1928; Pathol., Balto. City Hosps.; Consulting Pathologist, Frederick City Hosp., 1925-1930; Ass't., Instr. and Assoc. in Path., Johns Hopkins Med. Sch., 1923-1930; *Pathologist, Duke Hospital, 1930—*

GEORGE MARGOLIS, A.B., M.D., *Assistant Professor of Pathology.*

A.B., Johns Hopkins, 1936; M.D., Duke, 1940; Int. in Path., Duke, 1940-1941; Ass't. Res. in Path., Duke, 1941-1943; Res. in Path., Duke, 1943-1944; M.C., A.U.S., 1944-1947; Volunteer in Neuropath., Montefiore Hosp., N. Y., 1948; Assoc. in Path. in charge of Neuropath., 1947-1951; *Assistant Professor of Pathology in charge of Neuropathology, 1951—*

\* On leave, 1950-51.



LELAND D. STODDARD, A.B., M.D., *Associate in Pathology.*

A.B., DePauw, 1940; M.D., Johns Hopkins, 1943; Int. in Path., Duke, Jan.-Sept. 1944; M.C., A.U.S., Sept. 1944-Dec. 1946; Ass't. Res. in Path., Duke, 1947, 1948; Res. and Instructor in Path., Duke, 1949; Instructor in Path., Duke, 1949-1950; *Associate in Pathology, Duke Hospital, 1950—*

HUGH DORTCH, JR., B.S., M.D., *Associate in Pathology.*

B.S., U. N. C., 1943; M.D., Duke, 1945; Int. in Path., Duke, 1945-1946; M.C., A.U.S., July 1946-May 1948; Fellow, Undergraduate Cancer Training Program, Duke, 1948-1949; Ass't. Res. in Path., Duke, July 1949-Feb. 1950; Res. and Instructor in Path., Duke, Feb. 1950-June 1950 and Oct. 1950-June 1951; *Associate in Pathology, Duke Hospital, 1951—*

JOSHUA L. EDWARDS, B.S., M.D., *Instructor in Pathology.*

B.S., U. Florida, 1939; M.D., Tulane, 1943; Rotat. Int., South. Baptist Hosp., New Orleans, 1943-1944; M.C., A.U.S., 1944-1946; General Practice, 1946-1948, Florida; Res. in Path., Touro Infirmary, New Orleans, 1948-1949; Ass't. Res. in Path., New Eng. Deaconess Hosp., Boston, 1949-1950; Res. in Path., New Eng. Deaconess Hosp., Boston, 1950-1951; *Instructor in Pathology, Duke Hospital, 1951-1952—*

CARL BISHOP, *Technical Assistant in Pathology.*

## GRADUATE STUDENTS (HOUSE STAFF)

### RESIDENTS AND INSTRUCTORS IN PATHOLOGY

ALBERT G. SMITH, M.D., Washington U., 1947.

### ASSISTANT RESIDENTS AND ASSISTANTS IN PATHOLOGY

OSCAR DUQUE, M.D., U. of Antioquia, South America, 1947.

BERNARD F. FETTER, A.B., Johns Hopkins, 1941; M.D., Duke, 1944.

### INTERNS AND ASSISTANTS IN PATHOLOGY

WILLIAM M. BERTON, M.D., U. California, 1949.

LEON WILLIAMS POWELL, JR., A.B., Duke, 1947; M.D., Johns Hopkins, 1951.

ANIBAL ZAVALA, M.D., Sn. Fernando U. N. M. S. M.

*General Pathology.* The course in general pathology is given during the fifth and sixth quarter of the curriculum, following completion of the prerequisite courses in anatomy, physiology, biochemistry and bacteriology. All the work of the class is done with small groups, each under the guidance of a senior instructor and his junior assistant. The histological aspects of the pathological processes are studied coincidentally with the gross anatomical and physiological alterations of the tissues, thus maintaining a unity of conception of disease. As the various pathological processes and the diseases arising from their elaboration are studied by the student groups, assignments involving reports on the study of groups of cases are made to individual students. The group work and the individual student reports are supplemented by weekly conferences involving the class as a whole and dealing with problems presented by current autopsies and with other problems of general importance. Student collaboration in post-mortem studies is required. Cases thus studied are presented by the student before the class under the direction of the staff; this takes the form of a clinical-pathological conference in which each student plays a particular role.

*Elective Courses.* Special courses in pathology are given to students who have completed the course in general pathology. These courses are available through special arrangement.

*Clinical-Pathological Conference.* A weekly clinical-pathological conference for advanced study is held on Saturdays. It is open to all persons interested, but is designed especially for the Hospital and Medical School Staff. Attendance by all the students is encouraged but is optional. Miscellaneous weekly pathological conferences dealing with current cases under treatment on the various services are held for instruction of the staffs concerned.

*Student Research.* Research facilities are provided for competent students. Those who show an interest in investigative work are given every encouragement and are allowed to work independently or in collaboration with the staff.

*Postgraduate Instruction.* The staff of the department is composed of senior nonresident and junior resident members. The junior resident staff consists of interns, assistant residents, and a resident; all of these are active teachers as well as advanced students of disease. Ample opportunity for the development of a career in the field of pathology is provided for these men.

*Medicolegal Instruction.* The department works in close cooperation with the local coroner's office. Special medicolegal investigations for others are undertaken from time to time. The department collaborates with other departments of the Schools of Medicine and Law in a course in legal medicine that is given in alternate years.

## *Medicine*

EUGENE ANSON STEAD, JR., B.S., M.D., *Florence McAlister Professor of Medicine and Chairman of the Department.*

B.S. and M.D., Emory Univ., 1928 and 1932; Int. Med., Peter Bent Brigham Hosp., 1932-1933; Research Fellow in Med., Harvard, 1933-1934; Int. Surg., Peter Bent Brigham Hosp., 1934-1935; Ass't. Res. in Med., Cincinnati Gen'l. Hosp., 1935-1936; Res. in Med., Cincinnati Gen'l. Hosp., 1936-1937; Instr. in Med., Univ. of Cincinnati, 1935-1937; Res. Phys., Thorndike Memorial Laboratory; Ass't. in Med., Harvard and Boston City Hosp., 1937-1939; Associate in Med., Peter Bent Brigham Hosp., 1939-1942; Instr. in Med., Harvard, 1939-1941; Assoc. in Med., Harvard, 1941-1942; Act. Phys.-in-Chief, Peter Bent Brigham Hosp., 1942; Prof. of Med. and Phys.-in-Chief, Emory Div. of Grady Hosp., 1942-1946; Dean, Emory Univ. Sch. of Med., 1945-1946; *Physician, Duke Hospital, 1947—*

JASPER LAMAR CALLAWAY, B.S., M.D., *Professor of Dermatology and Syphilology.*

M.D., Duke, 1932; B.S., Alabama, 1935; Ass't. Instr. in Derm. and Syphil., Univ. of Pa. Med. Sch., 1932-1933; Int. and Ass't. Res. in Med., Duke Hosp., 1933-1935; Instr. in Phys. Diag. and Path., Univ. of Alabama, Jan.-July, 1935; Instr. in Derm. and Syphil., Pa. Sch. of Med., 1935-1937; Ass't. Field Physician, U. S. Public Health Serv., Feb.-July, 1937; *Physician and Dermatologist, Duke Hospital, 1937—*

OSCAR CARL EDVARD HANSEN-PRÜSS, A.B., M.D., *Professor of Medicine in Charge of Clinical Microscopy.*

A.B., Universidad Mayor de San Marcos, 1919; Vol. Ass't. in Path., Friedrich Wilhelm Universität, Berlin, 1920-1921; M.D., Johns Hopkins, 1924; Int. Ass't. Res. in Med., and Ass't. Phys., Johns Hopkins Hosp., 1924-1930; Ass't. Instr. and Assoc. in Medicine, Johns Hopkins Med. Sch., 1925-1930; *Physician, Duke Hospital, 1930—*

JULIAN MEADE RUFFIN, A.B., M.A., M.D., *Professor of Medicine.*

A.B., M.A., and M.D., Virginia, 1921, 1922, and 1926; Int. and Res., Bellevue Hosp., N. Y., 1926-1928; Instr. and Phys. Diag., George Washington Med. Sch., 1928-1930; *Physician, Duke Hospital, 1930—*

DAVID TILLERSON SMITH, A.B., M.D., *Professor of Bacteriology, Chairman of the Department, and Associate Professor of Medicine.*

WALTER KEMPNER, M.D., *Associate Professor of Medicine.*

M.D., Heidelberg, 1927; Int. in Med., Univ. Hosp., Heidelberg, 1926-1927; Research Assoc. and Ass't. to Prof. O. Warburg, Kaiser Wilhelm Institut. f. Zellphysiologie, Berlin-Dahlem, 1927-1928 and 1933-1934; Ass't. Phys., Univ. Hosp. of Berlin, 1928-1933; *Associate Physician, Duke Hospital, 1934—*

WILLIAM MCNEAL NICHOLSON, A.B., M.D., *Associate Professor of Medicine, in Charge of Post-graduate Education and Diseases of Metabolism.*

A.B., Duke, 1927; M.D., Johns Hopkins, 1931; Int. in Med., Johns Hopkins Hosp., 1931-1932; Ass't. in Path. and Med., Johns Hopkins Med. Sch., 1932-1935; *Associate Physician, Duke Hospital, 1935—*

EDWARD STEWART ORGAIN, M.D., *Associate Professor of Medicine.*

M.D., Virginia, 1930; Int. Ass't. Res. and Res. in Med., Univ. Hosp., Cleveland, 1930-1933; Res. Fellow in Med., assigned to Cardiology, Mass. Gen'l. Hosp., 1933-1934; *Associate Physician, Duke Hospital, 1934—*

FRANK LIBMAN ENGEL, A.B., M.D., *Associate Professor of Medicine, and Associate in Physiology.*

A.B., Dartmouth Coll., 1934; M.D., Johns Hopkins, 1938; Int., Rot., Mt. Sinai Hosp., 1939-1941; House Phys., Mt. Sinai, 1941; Fellow, Nat'l. Res. Council, Yale, 1941-1943; Research Assoc., Yale, 1943-1946; Assoc. in Med., Emory Univ. Sch. of Med., 1946-1947; *Assistant Physician, Duke Hospital, 1947—*

JAMES PAISLEY HENDRIX, B.S., M.A., M.D., *Associate Professor of Medicine.*

B.S., Davidson, 1925; M.A., Davidson, 1926; M.D., Pennsylvania, 1930; Int., Hosp. of Univ. of Pa., 1930-1932; Res. Fellow in Pharm., Pennsylvania, 1932-1935; Instr. in Pharm., 1935-1938; Part-time Staff Phys., Med. and Gastro-Intestinal Clinics, University Hosp., 1935-1938; Lecturer in Pharm., Univ. of N. C. Med. Sch., 1943-1944; *Assistant Physician, Duke Hospital, 1938—*

JOHN BAMBER HICKAM, A.B., M.D., *Associate Professor of Medicine.*

A.B., Harvard College, 1936; M.D., Harvard, 1940; Int., Peter Bent Brigham Hosp., 1940-1942; Med. Res., Grady Hosp., 1942-1943; U. S. Army, 1943-1946; Ass't. in Med., Emory Univ. Sch. of Med., 1946-1947; *Assistant Physician, Duke Hospital, 1947—*

E. CHARLES KUNKLE, B.A., M.D., *Associate Professor of Medicine in Charge of Neurology.*

B.A., Haverford College, 1935; M.D., Cornell University Medical College, 1939; Intern and Assistant Resident, New York Hospital, and Assistant in Medicine, Cornell University Medical College, 1939-1942; Medical Corps, Army Air Forces (Major), 1942-1946; Research Fellow, New York Hospital, and Instructor in Medicine, Cornell University Medical College, 1946-1948; *Assistant Physician, Duke Hospital, 1948—*

ELIJAH EUGENE MENEFEE, JR., B.S., M.D., *Associate Professor of Medicine.*

B.S. and M.D., Duke, 1936; Int., N. Y. State Sanatorium, Raybrook, July 1-Aug. 31, 1936; Int. in Med., Duke Hosp., 1936-1937; Research Fellow in Med. and Bact., Duke Med. Sch., 1937-1938; Ass't. Cardiology, Mass. Gen'l. Hosp., 1938-1939; Res. in The., Bellevue Hosp., New York City, Jan. 1-Dec. 31, 1939; *Assistant Physician, Duke Hospital, 1940—*

JACK DUANE MYERS, A.B., M.D., *Associate Professor of Medicine.*

A.B., Stanford Univ., 1933; M.D., Stanford Univ. Sch. of Med., 1937; Int. in Med., Stanford Hosp., 1936-1937; Ass't. Res. in Med., Stanford Hosp., 1937-1938; Res. Fellow in Med., Harvard Med. School, 1938-1939; Ass't. Res. in Med., Peter Bent Brigham Hosp., 1939-1940; Res. in Med., Peter Bent Brigham Hosp., 1940-1942; Lt. Col., U. S. Army, Med. Corps, 1942-1945; Assoc. in Med., Emory Univ. Sch. of Med., 1945-1946; *Assistant Physician, Duke Hospital, 1947—*

ELBERT LAPSLEY PERSONS, A.B., M.D., *Associate Professor of Medicine, Director of Student Health, and Associate Professor of Preventive Medicine and Public Health.*

A.B., Ohio State, 1923; M.D., Harvard, 1927; Int., Huntington Mem. Hosp., Boston, 1925-1926; Int. and Res. in Med., Mass. Gen'l. Hosp., 1927-1930; Teaching Fellow in Med., Harvard Med. Sch., 1929-1930; Res. in Med. and Assistant Physician, Duke Hospital, 1930-1942; Col., Chief of Med. Serv., 65th (U. S.) Gen. Hosp., 1942-1945; *Assistant Physician, Duke Hospital, 1945-1946; 1945—*

RALPH WAYNE RUNDLES, A.B., Ph.D., M.D., *Associate Professor of Medicine.*

A.B., DePauw, 1933; Ph.D., Cornell, 1937; M.D., Duke, 1940; Ass't. and Instr. in Anat., Cornell, 1933-1937; Int., Ass't. Res. and Res. in Med., Univ. of Mich. Hosp., 1940-1943; Instr. and Research Ass't. in Med., Simpson Mem. Instit., 1943-1945; *Assistant Physician, Duke Hospital, 1945—*

MACDONALD DICK, B.A., M.A., M.D., *Assistant Professor of Physiology and Pharmacology, and Associate in Medicine.*

SAMUEL PRESTON MARTIN, M.D., *Assistant Professor of Medicine.*

M.D., Washington Univ. Sch. Med., 1941; Intern, Pathology, and Ass't., Dept. of Pathology, Washington Univ. Sch. Med., 1941; Intern and Ass't. Res., Med., Washington Univ. Sch. Med., 1942-1944; Ass't., Dept. of Med., Washington Univ. Sch. Med., 1943-1944; U. S. Army Med. Corps, 1944-1947; Resident and Instr., Med., Duke, 1947-1948; Research Fellow, American College of Physicians, The Rockefeller Inst. for Med. Res., 1948-1949; *Assistant Physician, Duke Hospital, 1949—*

TALMAGE LEE PEELE, A.B., M.D., *Associate Professor of Anatomy and Assistant Professor of Medicine.*JOHN BERNARD PFEIFFER, JR., B.S., M.D., *Assistant Professor of Medicine.*

B.S., St. Peter's College, Jersey City, N. J., 1938; M.D., Cornell, 1942; Intern., Med., New York Hosp., 1942-1943; Military Service, 1943-1946; Ass't. Res. and Ass't. in Med. and Neurol., New York Hosp. and Cornell, 1946-1948; Instr., Med., Cornell; Ass't. Phys. to Out-patients, New York Hosp., and Section Chief, Neurology, Kingsbridge Road, 1948-1949; *Assistant Physician, Duke Hospital, 1949—*

JOSEPH M. HITCH, A.B., M.S., M.D., *Associate in Dermatology and Syphilology.*

A.B., University of Delaware, 1929; M.S. and M.D., University of Virginia, 1933-1938; Intern in Dermatology and Syphilology, University of Virginia, 1933-1934; Rotating Intern, University of Oklahoma Hospital, 1934-1935; Assistant Resident, Dermatology and Syphilology, Cleveland City Hospitals, 1935-1936; Resident in Dermatology and Syphilology, University of Virginia, 1936-1937; Instructor in Dermatology and Syphilology, University of Virginia Hospital, 1937-1938; Instructor in Dermatology and Syphilology, Duke University, 1938-1942; USNR, 1942-1946; *Assistant Physician, Duke Hospital, 1946—*

BERNARD C. HOLLAND, B.S., M.D., *Associate in Medicine.*

B.S., Emory, 1940; M.D., Emory, 1943; Intern., Med., Grady, 1943; Ass't. Res., Med., Grady, 1944; Ass't. Res., Med., Barnes Hospital, St. Louis, 1944-1945; Ass't. Res., Med., Grady, 1945; U. S. Army Med. Corps, 1945-1947; Ass't. Res., Med., Duke, 1947-1948; Res. and Instr. in Med., 1948-1949; Fellow, USPHS, 1949; *Assistant Physician, Duke Hospital, 1948—*

GRACE PARDRIDGE KERBY, B.S., M.D., *Associate in Medicine, Resident in Medicine.*

B.S., Fla. State College, 1933; M.D., Duke, 1946; Intern, Med., 1946-1947; Ass't. Res. and Res. in Derm. and Syphil., Duke, 1947-1950; Resident in Medicine, Duke, 1950-1951; *Assistant Physician, Duke Hospital, 1947—*

JESSICA H. LEWIS, A.B., M.D., *Associate in Medicine.*

A.B., Goucher College, Baltimore, 1938; M.D., Johns Hopkins, 1942; Intern, Rotating, Hospital for Women of Maryland, 1942-1943; Assistant Resident, Medicine, University of California Hospital, 1943-1944; Research Fellow, Thorndike Memorial Laboratory and Harvard University, and Assistant in Medicine, Boston City Hospital, 1944-1946; Research, Emory University School of Medicine, 1946-1947; Post-doctorate Research Fellow, USPHS, Physiology Dept., U. N. C., Chapel Hill, and Duke, 1947-1948; Research Associate, Dept. Physiology, U. N. C., Chapel Hill, 1948; *Assistant Physician, Duke Hospital, 1947—*

THEODORE B. SCHWARTZ, B.S., M.D., *Associate in Medicine.*

B.S., Franklin and Marshall College, 1939; M.D., Johns Hopkins Sch. of Med., 1943; Intern in Med., Johns Hopkins Hosp., 1943; U. S. Army Med. Corps, 1944-1946; Ass't. Res. and Res. in Med., Univ. of Utah, 1946-1948; Fellow in Medicine (USPHS), Duke, 1948-1950; Damon Runyon Senior Clinical Research Fellow; *Assistant Physician, Duke Hospital, 1948—*

HELEN STARKE, A.B., M.D., *Associate in Medicine.*

A.B., Duke, 1938; M.D., Duke, 1942; Intern, Med., Duke, 1942-1943; Research Assistant, Duke, 1942-1943; Ass't. Res., Med., Strong Memorial Hosp., 1943-1944; Fellow, Medicine, Duke, 1944-1948; *Assistant Physician, Duke Hospital, 1944—*

CHARLES WOODROW STYRON, B.S., M.D., *Associate in Medicine.*

B.S., N. C. State, 1934; M.D., Duke, 1938; Int., Ped., Duke, July 1938-March 1939; Int. and Res., Med., Boston City Hosp., April 1939-October 1940; Elliott P. Joslin Fellow in Med., New England Deaconess Hosp., October 1940-September 1942; Lt. Comdr, M.C., USNR, October 1942-February 1946; *Assistant Physician, Duke Hospital, 1946—*

## INSTRUCTORS

SHERWOOD W. BAREFOOT, B.S., M.D., *Instructor in Dermatology and Syphilology.*

B.S., U. N. C., 1936; M.D., Duke, 1938; Intern and Ass't. Res., Med., Duke, 1938-1939; Ass't. Res., Derm. and Syphil., Duke, 1940; Dermatologist, U. S. Army, 1941-1945; Research Fellow, Bellevue Hosp., 1940-1941; Fellow, Derm. and Syphil., Duke, 1945-1946; Private Practice in Dermatology and Syphilology, Greensboro, N. C.; *Assistant Physician, Duke Hospital, 1946—*



**RODERICK M. BUIE, B.S., M.D., *Instructor in Medicine.***

B.S., Wake Forest College, 1941; M.D., Bowman Gray Med. Sch., Sept. 1944; Intern, Medicine, Mass. Memorial Hospitals, Boston, Mass., 1944-1945; Ass't. Res., Medicine, Parkland Hospital, Dallas, Texas, 1945-1946; U. S. Navy Med. Corps, 1946-1948; Ass't. Res. and Res., Med., Parkland Hosp., Dallas, Texas, 1948-1950; Private Practice, Internal Medicine, Greensboro, N. C., April, 1950; *Assistant Physician, Duke Hospital, 1950—*

**PAUL C. CAMPBELL, M.D., *Instructor in Medicine.***

M.D., Univ. of Buffalo Sch. of Med., 1936; Intern, Edward J. Meyer Memorial Hospital, Buffalo, N. Y., 1936-1937; Ass't. Res., Dermatology and Syphilology, Edward J. Meyer Memorial Hospital, Buffalo, N. Y., 1937-1940; Private Practice, Fayetteville, N. C., 1940-1941; U.S.P.H.S., 1941-1950; Private Practice, Fayetteville, N. C., 1950; *Assistant Physician, Duke Hospital, 1951—*

**CHESTER CASSEL, B.S., M.D., *Instructor in Medicine.***

B.S., Univ. of Fla., 1939; M.D., Columbia, 1943; Intern, Mixed, Mt. Sinai Hosp., 1943; U. S. Army Med. Corps, 1944-1946; Res., Chest Serv., Bellevue Hosp., 1946-1947; Res., Bact. and Path., Mt. Sinai Hosp., 1947-1948; Res., Med., Mt. Sinai Hosp., 1948-1949; *Assistant Physician, Duke Hospital, 1949—*

**ALBERT DERWIN COOPER, A.B., M.D., *Instructor in Medicine.***

A.B. and M.D., George Washington, 1931 and 1932; Int., Rotat., Garfield Mem. Hosp., Washington, 1931-1932; Int. in Path. and Med., Duke Hospital, 1932-1934; Priv. Prac., Internal Med. and Allergy, 1934-1944; Med. Dir., Durham County Tuberculosis Sanat.; Ass't. Health Officer, Durham City and County Health Departments, Durham, N. C., 1944; *Assistant Physician, Duke Hospital, 1944—*

**SAMUEL L. ELFMON, B.S., M.D., *Instructor in Medicine.***

B.S., Univ. of Richmond, 1932; M.D., Medical College of Virginia, 1935; Intern., Rotating, Highsmith Hospital, Fayetteville, N. C., 1935-1936; Resident, Med., Highsmith Hosp., 1936-1937; Private Practice, 1937-1942; U. S. Army Medical Corps, 1942-1945; Private Practice, Fayetteville, N. C., since December, 1945; *Assistant Physician, Duke Hospital, 1949—*

**WALTER CLEVELAND FITZGERALD, N.C.B.S., M.D., *Instructor in Medicine.***

N.C.B.S., Davidson College, 1940; M.D., Univ. of Virginia, 1943; Intern, Medicine, Univ. of Virginia, 1944; Ass't. Director Student Health, Univ. of Virginia, 1945; U. S. Army Medical Corps, 1945-1947; Resident, Dermatology and Syphilology, Univ. of Virginia, March 1947-July 1950; *Assistant Physician, Duke Hospital, 1951—*

**WILLIAM J. FLEMING, A.B., M.D., *Instructor in Medicine.***

A.B., Stanford, 1940; M.D., Stanford, 1945; Intern, Rotating, San Francisco County Hosp., 1944-1945; Ass't. Res., Med., San Francisco County Hosp., 1945-1946; U. S. Army Med. Corps, 1946-1948; Ass't. Res., Med., Duke, 1948-1949; *Assistant Physician, Duke Hospital, 1949—*

**JOSEPH S. HIATT, JR., A.B., M.D., *Instructor in Medicine.***

A.B., Duke, 1936; M.D., Duke, 1939; Intern, N. C. Sanatorium, 1940; Intern and Ass't. Res., Duke, 1946-1942; U. S. Army Medical Corps, 1942-1945; Resident Physician, N. C. Sanatorium, 1945-1946; Assoc. Med. Dir. and Assoc. Sup't., N. C. Sanatorium, 1946; *Assistant Physician, Duke Hospital, 1949—*

**S. FRANK HORNE, A.B., M.D., *Instructor in Medicine.***

A.B., Duke, 1939; M.D., Duke, 1942; Intern and Resident, Medicine, Bowman Gray Sch. of Med., 1942-1944; U. S. Army Medical Corps, two and one-half years; Graduate Training in Dermatology and Syphilology, Univ. of Michigan, three years; *Assistant Physician, Duke Hospital, 1950—*

**CARL C. JONES, JR., B.S., M.D., *Instructor in Medicine.***

B.S., Emory, 1943; M.D., Emory, 1945; Intern, U. S. Naval Hosp., Charleston, S. C., 1945-1946; USNR, 1946-1948; Ass't. Res., Med., Bowman Gray, 1948-1950; *Assistant Physician, Duke Hospital, 1950—*

**CLARENCE WILLIAM LEGERTON, JR., B.S., M.D., *Instructor in Medicine.***

B.S., Davidson College, 1943; M.D., Medical College of the State of South Carolina, 1946; Intern, Rotating, University Hospital, Baltimore, Md., 1946-1947; Ass't. Resident, Med., University Hospital, 1947-1948; U. S. Army Medical Corps, 1948-1950; Residency in Pathology, Medical College of the State of South Carolina, 1950-1951; *Assistant Physician, Duke Hospital, 1951—*

**WILLIAM F. LOVELL, A.B., M.D., *Instructor in Medicine.***

A.B., Duke, 1942; M.D., Duke, 1945; Intern, Med., Duke, 1945-1946; U. S. Navy, 1946-1948; Res., Med., Henry Ford Hosp., 1948-1950; *Assistant Physician, Duke Hospital, 1950—*



JOSEPH MCCracken, A.B., M.D., *Instructor in Medicine.*

A.B. and M.D., Duke, 1934 and 1937; Intern, Pathology, Baltimore City Hospital, 1937-1938; Intern, Medicine, Baltimore City Hospital, 1938-1939; Assistant Resident in Medicine, Grady Hospital, 1939-1940; Resident in Medicine, Pratt Diagnostic Hospital, Boston, Mass., 1940-1941; Major, U. S. Army Medical Corps, 1942-1946; Private Practice in Internal Medicine, Durham, N. C., 1946; *Assistant Physician, Duke Hospital, 1946—*

CLARENCE M. McMURRAY, B.S., M.D., *Instructor in Medicine.*

B.S., Presbyterian College, 1946; M.D., Bowman Gray School of Medicine, 1946; Intern, Rotating, Columbia Hospital, Columbia, S. C., and St. Louis City Hospital, 1946-1947; Residency, Bowman Gray, 1947-1950; *Assistant Physician, Duke Hospital, 1950—*

JAMES F. SCHIEVE, D.V.M., M.D., *Instructor in Medicine.*

D.V.M., Michigan State College, 1940; M.D., College of Medicine, University of Cincinnati, 1943; Internship, Rotating, Cincinnati General Hospital, Jan.-Sept., 1944; Assistant Resident, Medicine, Cincinnati General Hospital, Sept., 1944-July, 1945; Assistant Resident, Medicine, Grady Memorial Hospital, Atlanta, Georgia, July, 1945-March, 1946; Med. Corps, AUS, 1946-1948; Senior Assistant Resident, Medicine, Duke Hospital, Durham, N. C., Feb., 1948-July, 1949; *Assistant Physician, Duke Hospital, 1949—*

WILLIAM VANCE SINGLETARY, A.B., M.D., *Instructor in Medicine.*

A.B., University of North Carolina, 1940; M.D., Duke, 1943; Intern., Med., Duke, 1944; Ass't. Res., Med., Watts, 1944-1945; Res., Med., Watts, 1945-1946; U. S. Army Medical Corps, 1946-1948; Ass't. Res., Med., Duke, 1948; Private Practice, Internal Medicine, Durham, 1948; *Assistant Physician, Duke Hospital, 1948—*

JOSEPH HAROLD ST. JOHN, B.S., M.D., *Instructor in Medicine.*

B.S. and M.D., Duke, 1945; Intern, Med., Duke, 1945-1946; U. S. Army Med. Corps, 1946-1948; Ass't. Res., Med., Duke, 1948-1949; *Assistant Physician, Duke Hospital, 1949—*

HOMER A. SIEBER, B.S., M.D., *Instructor in Medicine.*

B.S., Roanoke College, 1943; M.D., Duke, 1946; Intern, Med., Duke, 1946-1947; U. S. Army Medical Corps, 1947-1949; Ass't. Res., Med., Univ. of Virginia Hospital, 1949-1951; *Assistant Physician, Duke Hospital, 1951—*

E. CLINTON TEXTER, JR., B.A., M.D., *Instructor in Medicine.*

B.A., Michigan State College, 1943; M.D., Wayne Univ. College of Med., 1946; Intern, Rotating, Providence Hosp., Detroit, Mich., 1946-1947; U. S. Navy Medical Corps, 1947-1949; Research Fellow in Med., Cornell, and Ass't. Physician, Out-patient Dept., New York Hospital, 1949-1950; Ass't. Res., Goldwater Memorial Hospital, N. Y., 1950-1951; *Assistant Physician, Duke Hospital, 1951—*

FREDERICK A. THOMPSON, JR., M.D., *Instructor in Medicine.*

M.D., Duke, 1946; Intern., Med., Duke, 1946-1947; Ass't. Res., Med., Duke, 1947-1948; Ass't. Prof. Experimental Med., School of Public Health, Univ. of N. C., 1948-1950; *Assistant Physician, Duke Hospital, 1950—*

CARL M. VOYLES, JR., B.S., M.D., *Instructor in Medicine.*

B.S., William and Mary, 1945; M.D., Duke, 1945; Intern, Med., Johns Hopkins Hospital, 1945-1946; Medical Officer, AUS, 1946-1948; Ass't. Res., Med., Duke, 1948-1950; *Assistant Physician, Duke Hospital, 1950—*

WILLIAM W. WATKINS, M.D., *Instructor in Medicine.*

M.D., Duke, 1945; Intern, USN Hosp., Portsmouth, Virginia, 1945-1946; Medical Officer, USN, 1946-1948; Ass't. Res., Derm. & Syphil., Duke, 1948-1950; *1950—*

K. D. WEEKS, B.S., M.D., *Instructor in Medicine.*

B.S., Davidson College, Davidson, N. C., 1935; M.D., Duke, 1939; Intern in Medicine, Duke, 1939-1940; Assistant Resident in Medicine, Duke, 1940-1941; Assistant Resident in Pathology, Vanderbilt University School of Medicine, 1941-1942; First Assistant Resident in Medicine, Duke, 1942-1943; Resident Physician in Medicine, Duke, 1943-1944; Lt. (MC), USNR, 1944-1946; Private Practice in Internal Medicine, Rocky Mount, N. C., 1946; *Assistant Physician, Duke Hospital, 1947—*

WILLIAM M. WILHOIT, B.A., M.D., *Instructor in Medicine, and Resident in Neurology.*

B.A., Univ. of Fla., 1941; M.D., Duke, Sept. 1944; Intern, Bellevue Hosp., N. Y., 1944-1945; U. S. Navy Medical Corps, 1945-1947; Residency, Neuropsychiatry, Duke and V. A. Mental Hygiene Clinic, Durham, N. C., 1947-1949; Residency, Neuropsychiatry and Medical Officer (Psychiatry), St. Elizabeth's Hosp., Washington, D. C., 1949-1950; *Assistant Physician, Duke Hospital, 1951—*

JAMES W. WOODS, B.A., M.D., *Instructor in Medicine.*

B.A., Univ. of Tenn., 1939; M.D., Vanderbilt, 1943; Intern, Rotating, U. of Pa. Hosp., 1943; Res., Med., U. of Pa. Hosp., 1944, 1946-1947; Fellow, Med. (Cardiology), U. of Pa. Hosp., 1947-1948; *Assistant Physician, Duke Hospital, 1949—*

## ASSISTANTS IN MEDICINE

SACHINDRANATH CHAUDHURI, M.D., *Assistant in Medicine.*

M.D., Calcutta Medical College, India, 1944; Clinical Training (in Surgery) in Medical College Hospitals to Sept., 1945; Trained at Prince Ghulam Md. Hospital to Sept., 1946, India; Research training (in Allergy), Indian Institute for Medical Research, Calcutta, Jan., 1947, to August, 1950; *Duke Hospital, 1951—*

GEORGE ELI KOURY, A.B., M.D., *Assistant in Medicine.*

A.B., Univ. of North Carolina, 1941; M.D., Tulane, 1944; Intern, Rotating, Charity, New Orleans, 1944-1945; U. S. Army Medical Corps, 1945-1948; Ass't. Res., Med., Tulane, 1948-1949; Instructor, Med., Tulane, 1949-1950; Private Practice, Internal Medicine, Burlington, N. C.; *Duke Hospital, 1950—*

E. T. KRAYCIRIK, M.D., *Assistant in Medicine.*

M.D., Duke, 1945; Intern, Med., U. of Rochester, 1945-1946; U. S. Navy, 1946; Ass't. Res., Med., Duke, 1946-1947; Private Practice, Internal Medicine, Burlington, N. C., 1947; *Duke Hospital, 1949—*

ERNST PESCHEL, M.D., *Research Assistant in Medicine.*

M.D., Berlin, 1930; Int. in Medicine, Univ. Hosp., Berlin, 1929-1930; Vol. Ass't. Phys., Univ. Hosp., Berlin, 1930-1933; *Duke Hospital, 1947—*

RUTH LOHMANN-PESCHEL, M.D., *Research Assistant in Medicine.*

M.D., Berlin, 1931; Int. in Medicine, Univ. Hosp., Berlin, 1930-1931; Vol. Ass't. Phys., Univ. Hosp., Berlin, 1931-1933; Ass't. Phys., Univ. Hosp., Berlin, 1933-1938; Dr. habil., Univ. Berlin, 1938; *Duke Hospital, 1947—*

CLOTILDE SCHLAYFR, Ph.D., *Research Assistant in Medicine.*

Ph.D., Heidelberg, 1927; Voluntary Research Ass't. in Cellular Physiol., University Hosp. of Berlin, 1933-1935; *Duke Hospital, 1937—*

P. W. SMITH, *Technical Instructor in Clinical Microscopy.*

## FELLOWS

DAVID M. BELL, B.A., M.D., L.M.C.C., University of Alberta, Canada, 1939 and 1943; Fellow in Medicine, Duke, 1950—

THOMAS WADE BURNS, B.A., M.D., and M.S., University of Utah, 1945, 1947 and 1948; Intern and Ass't. Resident, Boston City Hospital, 1948-1950; Fellow in Medicine, Duke, 1950—

GEORGE W. CRANE, A.B., DePauw Univ., 1942; M.B., Northwestern, 1945; M.D., Northwestern, 1946; Fellow, Dermatology and Syphilology, Duke, 1949—

JOSEPH MURPHY RYAN, A.B., Ohio State University, 1940; M.D., University of Michigan, 1943; Intern, City Hospital, Cleveland, Ohio, 1943-1944; Residency, City Hospital, Cleveland, Ohio, 1946-1949; Fellow in Medicine, Duke, 1950—

WILLIAM J. TAYLOR, B.S., Yale, 1943; M.D., Harvard, 1947; Intern, Boston City Hospital, 1947-1948; Assistant Resident, Medicine, Duke, 1948-1950; Fellow, Medicine, Duke, 1950-51.

## HOUSE STAFF

Assistant Residents and Assistants in Medicine  
(1950-1951 and 1951-1952)

IVAN L. BENNETT, M.D., Emory, 1946; 1950—

MARY CAROLINE BECKER, A.B., Vanderbilt, 1946; M.D., Hopkins, 1950; 1950—

MED SCOTT BROWN, B.S., Miss. State College for Women, 1940; M.D., Emory Univ., 1950; 1951—

DONALD D. CARTER, M.D., Duke, 1947; 1948—

LEIGHTON E. CLUFF, M.D., George Washington University, 1940; 1950—

GEORGE ALVA EDWARDS, B.A., Howard Payne College, 1939; M.D., Southwestern, 1950; 1951—

LADD W. HAMRICK, JR., B.S., Wake Forest, 1943; M.D., Bowman Gray, 1946; 1950—

MURRAY B. HUNTER, M.D., Duke, 1949; 1950—

ROBERT F. KIBLER, B.S., Duke, 1945; M.D., Duke, 1948; 1951—

FRANCIS PARKER KING, B.S., University of North Carolina, 1944; M.D., Harvard, 1946; 1951—

RAMON L. LANGE, M.D., Duke, 1949; 1949—

WILLIAM S. LYNN, JR., B.S., Alabama Polytechnic Inst., 1943; M.D., Columbia, 1946, 1948—

HARRY T. McPHERSON, B.S., Duke, 1944; M.D., Duke, 1948; 1949—

THEO H. MEES, B.S., Capital Univ., Columbus, Ohio, 1938; M.D., Duke, 1942; 1950—

JOHN C. MULLER, B.S., The Citadel, 1948; M.D., Duke, 1948; 1949—

BARBARA C. NEWBORG, A.B., Swarthmore, 1941; M.D., Hopkins, 1949; 1949—

GERALD P. RODNAN, M.D., State University Medical Center, New York, 1949; 1951—

ROBERT A. SHIMM, B.A., Columbia, 1944; M.D., Columbia, 1948; 1951—

EUGENE J. TOWBIN, B.A., New York University, 1941; M.D., University of Rochester, 1949; 1949—

#### INTERNS

(1950-1951 and 1951-1952)

ROY AUGUSTA AGNER, JR., A.B., Catawba College, Salisbury, N. C.; M.D., Duke, 1950; 1951—

MARY CAROLINE BECKER, A.B., Vanderbilt, 1946; M.D., Hopkins, 1950; 1950—

LACHLAN L. CAMPBELL, M.D., Duke, 1950; 1950—

CHARLES H. CASTLE, B.S., Univ. of Mississippi, 1948; M.D., Duke, 1951; 1951—

ELISABETH BURNETT DECKER, B.A., Univ. of Richmond, Virginia, 1947; M.D., Cornell, 1951; 1951—

ARNOLD FIELDMAN, B.S., Yale, 1944; M.D., Tufts College Med. Sch., 1951; 1951—

STEPHEN ROBERT FROMM, B.S., Indiana University, 1947; M.D., Harvard, 1951; 1951—

THOMAS L. GORSUCH, M.D., Duke, 1951; 1951—

EARL HALTIWANGER, JR., A.B., Emory University, 1947; M.D., Duke, 1950; 1951—

REGINALD B. HENRY, JR., A.B., Univ. of Virginia, 1946; M.D., Univ. of Virginia, 1950; 1950—

ROBERT L. HERSHBERGER, M.D., Duke, 1950; 1951—

MURRAY B. HUNTER, M.D., Duke, 1949; 1950—

MURRAY T. JACKSON, JR., M.D., Duke, 1950; 1951—

CARL ALPHONS JAEGER, M.D., Duke, 1950; 1951—

SUSAN ROUTH McFADYEN, A.B., Woman's College of University of North Carolina, 1947; M.D., Duke, 1950; 1951—

THOMAS ARTHUR McGRAW, B.A., Yale, 1944; M.D., Cornell, 1951; 1951—

HENRY D. McINTOSH, B.S., Davidson, 1943; M.D., Univ. of Pennsylvania, 1950; 1950—

LYOYD HAMILTON RAMSEY, B.S., University of Kentucky, 1942; M.D., Washington University, St. Louis, Mo., 1950; 1950—

FABIAN JARRETT ROBINSON, M.D., Southwestern, 1948; 1950—

LEE MYRL SPIVEY, B.S., Florida Southern College, 1947; Emory University, 1951; 1951—

GORDON DOUGLAS STANLEY, B.S., University of Florida, 1947; M.D., Duke, 1950; 1951—

JOHN M. WALLACE, A.B. and M.D., Washington University, 1946 and 1950; 1950—

CHARLES D. WILLIAMS, JR., B.S., Wofford, 1946; M.D., Duke, 1949; 1950—

*Introduction to Clinical Medicine and Physical Diagnosis.* This course is initiated, in the fifth quarter, by introductory lectures, case discussions, and instruction in the methods of physical examination and history taking. Early in the course students begin work at the

bedside in the examination of selected patients. Emphasis throughout is placed on instruction individually or in small groups. The interpretation and pathogenesis of all abnormal findings are stressed. The Departments of Neurology and Psychiatry provide training in neurological and mental examinations. This plan of teaching continues in the sixth quarter, when, in addition, instruction in the more specialized methods of examination is provided through the co-operation of the Departments of Surgery, Obstetrics, Gynecology, and Radiology.

*Clinical Microscopy* is given in the fifth quarter. The course includes the essentials of hematology and the examination of fresh material, such as urine, stools, spinal fluids, sputum, transudates, and exudates. The most important parasites of man are studied by the use of fresh and museum material. Second-year and senior students are given opportunities for special work and for investigation. This course is supplemented in the Junior and Senior years by Hematology Conferences, which are held weekly, and Ward Rounds, which are held three times weekly.

*Cutaneous Medicine and Syphilology.* Instruction consisting of lectures, seminars and study and treatment of patients in the out-patient clinics and on the wards is offered each quarter to Junior and Senior students. In addition, an elective course consisting of advanced teaching in clinical dermatology and syphilology is offered to a limited number of students.

*Junior and Senior Medicine.* The medical students are assigned to the medical wards as clinical clerks for one half of their time, and to the medical out-patient department where they examine patients for the other half of their time.

## *Neuropsychiatry*

**RICHARD SHERMAN LYMAN, B.A., M.D.,** *Professor of Neuropsychiatry and Chairman of the Department.*

B.A., Yale, 1913; M.D., Johns Hopkins, 1921; Int., Henry Phipps Psychiatric Clinic, 1921-1922; Charleton Fellow in Med., 1922-1923; and Assoc. in Psych., Johns Hopkins, 1923-1925; Clerkship, Neurology, Queens Square, London, 1925; Assoc. Prof. of Med., Rochester Med. Sch., 1925-1929; Volun. Ass't., Laboratory of Experiment. Physiol., Leningrad, U.S.S.R., 1929-1930; Assoc. Prof. of Neuropsych., First Nat'l. Med. Sch., Shanghai, China, 1930-1931, and Peiping Union Med. Coll., 1931-1937; Lecturer in Psych., Henry Phipps Psychiatric Clinic, 1938-1940; Training and Assessment Work in O.S.S., 1944-1945; *Neuropsychiatrist, Duke Hospital, 1940—*

**LESLIE BENJAMIN HOHMAN, A.B., M.D.,** *Professor of Neuropsychiatry.*

A.B., Univ. of Missouri, 1912; M.D., Johns Hopkins, 1917; Int., Ass't. Res. and Res., Henry Phipps Psychiatric Clinic, Johns Hopkins Hospital, 1917-1922; U. S. Army, 1917-1919; Priv. Practice, 1922-1943; Associate in Psych., Johns Hopkins, 1922-1924; Lecturer in Psych., Univ. of Maryland, 1939-1943; Comdr., Med. Corps, U. S. Navy, 1943-1946; Ass't. Prof. of Psych., Johns Hopkins, 1944-1946; *Neuropsychiatrist, Duke Hospital, 1946—*

**BINGHAM DAI, A.B., M.A., Ph.D.,** *Professor of Mental Hygiene and Psychotherapy.*

A.B., St. John's, 1923; M.A. and Ph.D., Chicago, 1932 and 1935; Fellow in Soc. Sc., Yale, 1932-1933; Instit. for Psychoanalysis, 1933-1935; Fell., Assoc. and Ass't. Prof. in Med. Psych., Peiping Union Med. Coll., China, 1935-1939; Lecturer in Soc., Tsin Hua, 1936-1937; Lecturer in Soc., Psych., Fisk, 1939-1942; 1943—



**MAURICE H. GREENHILL, A.B., M.D., Associate Professor of Neuropsychiatry.**

A.B., Rochester, 1931; M.D., Chicago, 1936; Int., Los Angeles Co. Gen'l. Hosp., 1936-1937; Psychiatrist, Worcester State Hosp., 1937-1939; Res. Psych., Mass. Gen. Hosp., 1939-1940; Rockefeller Fellow in Neurol., 1940-1941; Res. Fellow in Neurol., Harvard Med. Sch., 1940-1941; Res. Assoc., Neurological Unit, Boston City Hosp., 1940-1941; *Associate Neuropsychiatrist, Duke Hospital, 1940—*

**\*HANS LÖWENBACH, M.D., Assistant Professor of Neuropsychiatry.**

M.D., Hamburg, 1930; Int., Med. Clinic, 1929-1930; and Ass't. Physiolog. Inst., Freiburg i.B., 1930-1932; Ass't. Med. Clinic, Köln, 1932-1933; Ass't. Kaiser Wilhelm Inst. f. Hirnforschung, Physiolog. Abt., Berlin, 1933-1935; Fellow, Nansen Fund, Oslo, Norway, 1935-1936; Ship's Surg., Whaling Expeditions, 1936-1939; Res. Ass't. in Psych., Johns Hopkins Med. Sch., 1939-1940; *Assistant Neuropsychiatrist, Duke Hospital, 1940—*

**GEORGE FRASER SUTHERLAND, M.D., M.Sc., Associate Professor of Neuropsychiatry.**

M.D., McGill, 1928; M.Sc. (Physical), McGill, 1932; Int., Montreal Gen. Hosp., 1928-1929; Research Fellow in Biochem., McGill, 1929-1930; Demonstrator Physiolog., McGill, 1930-1934; Res. Med., Vancouver Gen. Hosp., 1934-1935; Research Assoc. Physiology, Cornell, 1935-1938; Ass't. in Psychiatry, Mass. Gen. Hosp., 1938-1940; Res. Phys., McLean Hosp., 1940-1941; Ass't. Phys. in Research Dept., Worcester State Hosp., 1942-1946; U. S. Army Med. Corps, 1942-1946; *Visiting Assistant Professor of Neuropsychiatry, Duke Hospital, 1948—*

**ROBERT BURKE SUIT, M.D., Assistant Professor of Neuropsychiatry.**

M.D., St. Louis, 1932; Int., Neuropsychiatric Serv., Alexian Bros. Hosp., St. Louis, 1931-1932; Int., St. Louis City Hosp., 1932-1933; Res. in Psychiatry, Highland Hosp., Asheville, N. C., 1933-1938; Ass't. in Psychiatry, Johns Hopkins Med. Sch., 1938-1940; Ass't. Dispen. Psych., Johns Hopkins Hosp., 1939-1940; *Assistant Neuropsychiatrist, Duke Hospital, 1940—*

**LEE GOODRICH SEWALL, A.B., M.D., Assistant Professor of Neuropsychiatry.**

A.B., Univ. of Texas, 1927; M.D., Univ. of Texas, 1931; Gen. Rotat. Int., Cleveland City Hosp., Cleveland, O., 1931-1932; Res. Phys. Med. and Surg., Deaconess Hosp., Cleveland, O., 1932-1933; Ass't. Res. Obstet., Univ. Hosp., Cleveland, O., 1933-1934; Gen. Practice, Waco, Texas, 1934-1938; Med. Off., VAH (NP Hosp.), North Little Rock, Ark., 1938-1943; Senior Med. Off., VAH, Ft. Custer, Mich. (NP Hosp.), 1943-1945; Lt. Col., U. S. Army, 1944-1946; Clin. Dir. VAH (NP Hosp.), Lyons, N. J., 1945-1947; Instructor, Clinical Psychiatry, Washington Univ., St. Louis, Mo., 1947-1948; Ch. Psy. and Neuro. Div., VA Branch Off., St. Louis, Mo., 1947-1948; Chief, Prof. Res. and Dir., Professional Education, VA Hosp. (NP Hosp.), Roanoke, Va., 1948; *Assistant Professor of Neuropsychiatry, Duke Hospital, 1949—*

**LOUIS DAVID COHEN, B.S., M.A., Ph.D., Assistant Professor of Neuropsychiatry, Assistant Professor of Psychology.**

B.S., Brooklyn, 1934; M.A., Columbia, 1936; Ph.D., Duke, 1949; Grad. Student, Psychology, N. Y. University, 1938-1940; Lt. Col., U. S. Army, 1942-1946; Assoc. in Clinical Psychology, Duke, 1946-1949; Ass't. Prof. of Psychology, Duke, 1949; *Assistant Professor of Neuropsychiatry, Duke Hospital, 1946—*

**KLAUS WILLIAM BERBLINGER, M.D., Associate in Neuropsychiatry.**

M.D., Munich, Germany, 1934; M.D., Bern, Switzerland, 1936; Int., German Hosp., London, England, 1934-1935; Int., DePaul Hosp., Norfolk, Va., 1938-1939; Res., Schinznach Hosp., Switzerland, 1935; Sanatorium Du Parc, Davos, Switzerland, 1936-1937; Grad. Work: Pathology, Univ. Bern, 1936; Radiology (Univ. Bern), 1936; Pathology/Bacteriology, Institute of Med. Research, Davos, Switzerland, 1937; Neurology and Psychiatry, Univ. of Zurich, 1938; Private Practice of Medicine, Norfolk, Va., 1939-1949; Member of Active, Visiting Staff, DePaul Hosp., Norfolk; Member of Active Visiting Staff, Norfolk Gen. Hosp.; Fellow in Psychosomatic Medicine, Duke Hospital, 1949-June 1950; Private Practice in Psychiatry, Norfolk, Virginia, and Chief, Division of Psychosomatic Medicine, DePaul Hospital, Norfolk, Virginia, July 1950; *Instructor in Neuropsychiatry, Duke Hospital, July 1950-December 1950; Associate in Neuropsychiatry, Duke Hospital, January 1951—*

**R. CHARMAN CARROLI, R.N., A.B., M.D., Associate in Neuropsychiatry.**

R.N., Highland Hosp., 1930; A.B., Duke, 1935; M.D., Colorado, 1939; Int. in Ped., 1939-1940, and Res. in Psychiatry, Duke Hospital, 1940-1942; Assoc. in Psych., Highland Hospital, Asheville, N. C., 1942-1944; Assistant Neuropsychiatrist, Duke Hospital, 1944; Med. Dir., Highland Hosp., Asheville, 1948; *Associate in Neuropsychiatry, Duke Hospital, 1944—*

**ROBERT LAWRENCE CRAIG, B.A., M.D., Associate in Neuropsychiatry.**

B.A., Amherst College, 1931; M.D., Johns Hopkins, 1935; Int. Med., Baltimore City Hosps., 1935-1936; Ass't. Res. Med., Baltimore City Hosps., 1936-1937; Ass't. Res. Neurology, Baltimore City Hosps., 1937-1938; Res., Neurology, Duke, 1938-1939; Res. Neuropsychiatry, V.A. Mental Hygiene Clinic, Duke, 1948; Instructor in Neurology, Duke, and Ass't. Neurologist, Duke, 1939-1942 and 1946-1947; Instructor in Psychiatry, Duke Hosp., 1949; Associate Med. Dir., Highland Hosp., Asheville, N. C., 1949; *Associate in Neuropsychiatry, Duke Hospital, 1948—*

\* On leave, 1950-51.



MARSHALL L. FISHER, B.S., M.D., *Associate in Neuropsychiatry.*

B.S., Univ. of Illinois, 1932; M.D., Univ. of Ill. Coll. of Med., 1935; Int., Rotating County Hosp., Chicago, 1936-1937; Res. and Assoc. Physician Psych., Mateno State Hosp., Mateno, Ill., 1937-1938; Private Practice, 1938-1942; Residency in Psych., Veterans Hospital, Palo Alto, Calif., and Langley Porter Clinic, San Francisco, Calif.; U. S. Army, Chief NP Section, Station Hosp., Camp Cooke, Calif.; Chief NP Section, 318th Station Hospital ETO; Chief NP Section 124th Gen. Hosp., ETO, 1942-1946; Private Practice one year with part-time appointment in Psychiatry, Regional Office, San Diego, Calif.; Director Psychiatric Education, Veterans Hospital, Roanoke, Va., since March 1, 1949; *Associate in Neuropsychiatry, Duke Hospital, 1949—*

JEWETT GOLDSMITH, A.B., M.D., *Associate in Neuropsychiatry.*

A.B., Johns Hopkins Univ., 1938; M.D., Univ. of Maryland School of Med., 1942; Int., Kings County Hosp., Brooklyn, N. Y., 1942-1943; Lieut., U. S. Navy, 1943-1946; V.A. Senior Res. in Psych., Duke Hospital, 1946-1948; Instructor in Neuropsychiatry, Duke Hospital, Jan. 1949-June 1949; Physician-in-charge, Neuropsychiatric Public O.P.C., Duke Hospital, July 1950; *Associate in Neuropsychiatry, Duke Hospital, July 1949—*

SEYMOUR ROBERT KAPLAN, M.D., *Associate in Neuropsychiatry.*

M.D., Duke, 1945; Rotating Internship, U. S. Naval Hospital, Oahu, Hawaii, July 1945-March 1946; Veteran Ass't. Res., Pediatrics, Duke Hospital, May 1948-June 1949; Ass't. Res. in Research, Willard Parker Hospital, New York, July-December 1948; U. S. Naval Medical Officer, April 1946-December 1947; *Veteran Resident in Neuropsychiatry, July 1949; Veteran Training Program, Duke Hospital, September 1950—*

VERNON KINROSS-WRIGHT, B.A., M.R.C.S., L.R.C.P., B.M.B.S., D.P.M., *Associate in Neuropsychiatry.*

B.A., Oxford, 1942; M.R.C.S., L.R.C.P., London, 1944; B.M.B.S., Oxford, 1945; D.P.M., London, 1947; Int. St Thomas's Hosp (Surrey branch); House Physician, Ass't Res., General Hospital, Ipswich, England, 1945; Res., St. Andrews Hospital, Northampton, Psychiatry, 1946; Graduate work, Psychiatry, Maudsley Hosp., London, 1945, 1946, and 1948; Graduate work, Neurology, Maiden Vale Hospital, London, 1945-1946; Ass't. Psychiatrist, St. Andrews Hosp., Northampton, England, 1947-1948; Director, Charlotte Mental Hygiene Clinic, June 1948; Director, Charlotte Mental Hygiene Clinic, June 1948-Oct. 1950; Director, Durham Child Guidance Clinic, November 1950; *Associate in Neuropsychiatry, Duke Hospital, 1949—*

RICHARD HART PHILLIPS, B.S., M.D., *Associate in Neuropsychiatry; Resident in Neuropsychiatry.*

B.S., University of North Carolina, 1944; M.D., New York University, 1945; Internship, Rotating, U. S. Naval Hospital, Camp Lejeune, N. C., 1945-1946; Ass't. Res., Mixed, Harrisburg Hospital, Harrisburg, Pa., 1947-1948; Lieut. (j.g.), U. S. Navy, Medical Corps, July 1943-March 1948; Assistant Resident Neuropsychiatry, Duke Hospital, January 1949-June 1949; Veteran Resident in Neuropsychiatry, Duke Hospital, July 1949-July 1950; Veteran Training Program, Duke Hospital, September 1950; *Resident in Neuropsychiatry, Duke Hospital, August 1950—*

IRVING PINE, M.D., *Associate in Neuropsychiatry.*

M.D., N. Y. Med. Coll., 1932; Int., Metropolitan Hosp., N. Y. City, June 1932-July 1933; Res., Tuberculosis, Seaview Hosp., S. I., N. Y., July 1933-June 1934; Res., Metabolism, Seaview Hosp., S. I., N. Y., July 1934-June 1935; Res., Tuberculosis, Municipal San., Otisville, N. Y., Sept. 1935 through December 1936; Res., Neuropsych., Duke Hosp., March through June 1947 and December 1948 through June 1949; Highland Hosp., Asheville, N. C., May 1946-November 1948 (excl. 3 mos. above); Associate in Neuropsychiatry, V. A. Hospital, N. Little Rock, Ark., 1939; 1st Lt. and Captain, AUS, May 1942-December 1945; Chief Rehab. and N. P. Consultations, V. A. Hosp., Oteen, N. C., April 1946-1947; Instructor, Neuropsychiatry and Acting Chief, EEG Lab., July 1, 1949, Duke Hospital; *Associate in Neuropsychiatry, Duke Hospital, 1949—*

ALBERT E. RAUH, M.D., *Associate in Neurology; Chief, Neurological Service, V. A. Hospital, Roanoke, Va.*

M.D., Harvard Med. Sch., 1935; Mass. Gen. Hosp., Ped. Int., 1936-1937; Fellow, Anatomy, Harvard, 1935 and 1937; Boston City Hosp., Neurology, 1937-1938; Fellow in Psych., Hartford Retreat, 1938-1940; Res. Psych., N. Y. St. Psych. Inst., 1940-1941; U. S. Army, 1941-1946; Sr. Psych., Rockland St. Hosp., 1945-1946; Ch. Neurol., U.S.V.A. Hosp., Lyons, N. J., 1946-1949 (NP Hosp.); V. A. Hosp., Roanoke, Va., Chief, Neurology, 1949; *Associate in Neurology, Duke Hospital, 1949—*

ZACHARIAH S. SIKES, JR., M.D., *Associate in Neuropsychiatry.*

M.D., University of Georgia, 1938; Int., Rotating, University Hosp., Augusta, Ga., 1938-1939; Residency, General, Atlantic Coast Line Hosp., Waycross, Ga., 1939-1940; Psychiatric Staff of the Milledgeville State Hosp. from Oct. 1, 1940-Oct. 10, 1947; for two years Consultant Surgeon for the Georgia Training School for Mental Defectives, Gracewood, Ga.; 4 months Acting Superintendent of Georgia Training School for Mental Defectives; Senior Physician, Fairfield State Hosp., Newtown, Conn., Oct. 1947-Sept. 1949; *Veteran Resident in Neuropsychiatry, Duke Hosp., Oct. 1949-August 1950; Staff Member, V. A. Hospital, Roanoke, Va., September 1, 1950; Associate in Neuropsychiatry, Duke Hospital, September 1950—*

GEORGE A. SILVER, B.S., M.D., *Associate in Neuropsychiatry.*

B.S., Guilford, 1934; M.D., Duke, 1938; Int., Ped., Duke, 1937-1938; Rotat. Int., St. Francis Hosp., Trenton, N. J., 1938-1939; Int., Obs., Marg. Hague Hosp., Jersey City, N. J., 1939; Gen. Practice, N. J., 1939-1941; Lt. Col. (Flight Surgeon), U. S. Army, March 1941-1946; Veteran Resident in Neuropsychiatry, Duke Hospital, 1946-1947; Instructor in Neuropsychiatry, Duke Hospital, 1948-June 1949; *Associate in Neuropsychiatry, Duke Hospital, 1946—*

WILLIAM EDGAR WILKINSON, B.S., M.D., *Professor of Military Science and Tactics; Associate in Neuropsychiatry.*

B.S., Davidson, 1928; M.D., Duke, 1932; Int., Surgery, Duke, 1932-1933; Ass't. Res., Pathology, Duke, 1933-1934; Ass't. Res., Surgery, Duke, 1934-1935; Med. Officer, U. S. Army, 1935; Prof. of Military Science and Tactics, Duke Hosp., 1949; *Associate in Neuropsychiatry, Duke Hospital, 1949—*

DAVID A. YOUNG, A.B., M.D., *Lecturer in Neuropsychiatry.*

A.B., North Carolina, 1928; M.D., Harvard, 1931; Int. Med., Mass. Gen. Hosp., 1931-1933; Int. and Res. in Neurol., Bellevue Hosp., 1933; Int. Psych., Worcester State Hosp., 1934; Res., Psych., McLean Hosp., Waverly, Mass., 1934; Senior Physician, McLean Hosp., 1936-1941; Ass't. Res. Neuropsych., Duke, 1935; Res. in Psych., Mass. Gen. Hosp., 1935-1936; Lecturer in Medicine, Univ. of N. C., 1946; *1946—*

MARIE BALDWIN, A.B., M.D., *Instructor in Neuropsychiatry.*

A.B., Erskine College, 1924; M.D., South Carolina State Med. Coll., 1929; Int., Gen., Parkview Hosp., Rocky Mount, N. C., 1929-1930; Int., Ped., Buffalo Children's Hosp., Buffalo, N. Y., 1930-1931; Ass't. Res., Psych., Duke, 1941-1945; Res., Med., Overlook Hosp., Summit, N. J., 1931-1932; Res., Psych., Duke, 1945-1946; Fellowship, Charlotte Mental Hygiene Clinic, 1945-1946; Senior Ass't., Highland Hospital, Asheville, N. C., June 1, 1946-January 1, 1949; Associate Psychiatrist, Highland Hospital, Asheville, N. C., January 1, 1949; *Instructor in Neuropsychiatry, Duke Hospital, 1949—*

WILLIAM F. BLAIR, A.B., T.D., M.D., *Instructor in Neuropsychiatry.*

A.B., T.D., Univ. of Kansas, 1934; M.D., School of Med., Univ. of Kansas, 1944; Ass't. Instructor, Dept. Psychology, Univ. of Kansas, 1935-1937; Ass't. and Instructor, Dept. of Physiology, School of Med., Univ. of Kansas, 1938-1942; Rotating Internship, St. Margaret's Hospital, Kansas City, Kan., Feb. 1944-Nov. 1944; Res., Clinical Roentgenology, Lewis G. Allen, M.D., Kansas City, Kan., Dec. 1944-May 1945; Private Practice, May 1945-Sept. 1947; Psychiatric Physician, Topeka State Hospital, Topeka, Kan., Sept. 1947-Sept. 1948; Acting Superintendent, Topeka State Hospital, Topeka, Kan., Sept. 1948-Sept. 1949; Veteran Resident in Neuropsychiatry, Duke Hospital, Sept. 16, 1949; *Instructor in Neuropsychiatry, Duke Hospital, Sept. 1950—*

EDWARD E. CALE, JR., B.S., M.D., *Instructor in Neuropsychiatry.*

B.S., Auburn, 1936; M.D., Tulane Med. School, 1941; Rotating Internship, San Diego Co. Hosp., 1941-1942; Navy Med. Corps, July 1942-March 1947; St. Elizabeth's Hosp., 1945 (4 mo.), San Diego Naval Hosp. (1 yr., 1945-1946, psychiatry), Naval Air Base, El Centro, Calif. (7 mo., 1946), Naval Air Sta., Corpus Christi, Tex. (3 mo., 1946-1947, psychiatry); Resident in Psychiatry: Southwestern Med. School (13 mo.), 1947-1948, Worcester State Hosp. (3 mo., back wards), 1948, Cushing V. A. Hosp. (9 mo., open ward psychotherapy, 6 mo., neurology under Dr. F. Quadfasel), 1948-1949; Staff Houston V. A. Hosp., 1950; Private Practice, Durham, N. C., September 1950; *Instructor in Neuropsychiatry, Duke Hospital, January 1951—*

STEPHEN ARNOLD GINN, A.B., M.D., *Instructor in Neuropsychiatry.*

A.B., Duke, 1936; M.D., Duke, 1941; Int., Rotating, St. Josephs, Atlanta, 1941-1942; Med. Officer, U. S. Navy, 1942-1946 (Epidemiology); Ass't. Res., Ped., Eggleston Hosp., Atlanta, 1946-1947; Res., Ped., Duke, 1947-1948; Child Psych., Bradley Home, E. Providence, R. I., 1948-1949; Psychiatry, Duke and Raleigh State Hosps., 1949-1950; *Instructor in Neuropsychiatry, Duke Hospital, 1949—*

JEAN MARTIN GLASGOW, B.S., M.D., *Instructor in Neuropsychiatry.*

B.S., College of William and Mary, 1932; M.D., Univ. of Va., 1936; Internship, Mixed, Parkview Hosp., Rocky Mount, N. C., 1936-37; Internship, Pediatrics, Duke Hosp., 1937-1938; Int., Pediatrics, Bellevue Hosp., 1938—6 months; Ass't. Res., Pediatrics, Duke Hosp., 1940-1941; Resident Physician, State Teacher's College, Farmville, Va., Jan. 1939-July 1940; Resident College Physician, Duke University (Part-time), 1940-1941; Private Pediatric Practice, Roanoke, Va., 1942-1949 (intermittently); *Veteran Resident in Neuropsychiatry, Duke Hospital, September 1949; Veteran Training Program, Duke Hospital, September 1950—*

JAMES OLIVER JACKSON, B.S., M.D., *Instructor in Neuropsychiatry.*

B.S., Univ. of Mo., Columbia, Mo., 1944; M.D., Wash. Univ. School of Med., St. Louis, 1946; Rotating Internship, Research Hosp., Kansas City, Mo., 1946-1947; Ass't. Res., Psych., Jefferson Brks. V. A. Hosp., St. Louis, Mo., 6 months, 1946; Ass't. Res., Psych., Brooks Gen. Hosp., San Antonio, Tex., 1947 and 1948; Ass't. Res., Psych., Winter V. A. Hosp., Topeka, Kan., 6 months, 1949; *Veteran Resident in Neuropsychiatry, Duke Hospital, March 1950; Veteran Training Program, Duke Hospital, September 1950—*

WILLIAM WAILES MAGRUDER, B.S., M.D., *Instructor in Neuropsychiatry.*

B.S., Mississippi State College, 1941; M.D., Duke, 1944; Int., Psych., Duke, October 1944 to July 1945; Res., Psych., Duke, July 1945 to April 1946; Veterans Hospital, Ft. Lyon, Colorado, July 1948 to October 1948; Associate in Psych., Highland Hospital, Asheville, N. C., October 1948; *Instructor in Neuropsychiatry, Duke Hospital, 1948—*

LEONARD J. RAVITZ, B.S., M.S., M.D., *Instructor in Neuropsychiatry.*

B.S., Western Reserve Univ.; Adelbert College, June 1944 (Cleveland, O.); M.D., Wayne Univ. College of Med., Detroit, March 1946; M.S., Yale Univ., June 1950; Assistant Electroencephalographer (to Dr. A. J. Derbyshire) and Research Asst. Dept. of EEG, Harper Hosp., Detroit, 1943-1946; Study of Hypnoanalysis with Dr. Milton H. Erickson, Wayne County Gen. Hosp. (Eloise), Eloise, Mich., 1945-1946; Rotating Internship, St. Elizabeth's Hosp., Washington, D. C., 1946-1947; Obstetrics and Pediatrics, Gallinger Municipal Hosp., Washington, D. C., 1946-1947; Jr. Asst. Res., Psych., Grace-New Haven Community Hosp., New Haven Unit, University Service, 1947-1948, New Haven, Conn.; Sr. Asst. Res., Psych., Grace-New Haven Community Hosp., New Haven Unit, University Service, 1948-1949; Assistant, Psychiatry and Mental Hygiene, Yale Univ. School of Med., New Haven, Conn., 1947-1949; Research Associate (to Dr. H. S. Burr), Section of Neuro-Anatomy, Yale Univ. School of Med., 1949-1950; *Veteran Resident in Neuropsychiatry, Duke Hospital, July 1950; Veteran Training Program, Duke Hospital, September 1950—*

WILLIAM P. WILSON, B.S., M.D., *Instructor in Neuropsychiatry.*

B.S., Duke, 1943; M.D., Duke, 1947; Int., Rotating, Gorgas Hosp., Aneon, C.Z., 1947-1948; Staff Physician, State Hosp., Raleigh, 1948-1949; *Instructor in Neuropsychiatry, Duke Hospital, 1949—*

SUSAN GOWER SMITH, A.B., M.A., *Associate in Nutrition.*

A.B., Barnard, 1919; M.A., Columbia, 1924; Chemist, N. Y. State Hosp., 1926-1930; Instr. in Biochem., Instr. in Physiol. and Pharm., Assoc. in Physiol. and Nutrition, and Associate in Med., Duke Hospital, 1930-1946; 1930—

BENJAMIN COLEMAN, D.D.S., A.B., M.D., *Assistant in Neuropsychiatry.*

D.D.S., Emory Univ. Dental School, Atlanta, Ga., 1925; A.B., Univ. of Alabama, Tuscaloosa, Ala., 1933; M.D., Emory Univ., Atlanta, Ga., 1937; General Internship, Jackson Memorial Hospital, Miami, Fla., 1937-1938; Capt., U. S. Army, October 1942-August 18, 1945 (Station Hosp., Long Beach, Cal., Air Corps, General Medicine; Instructor in Medical Emergency Treatment, Camp Barkley, Texas; Plastic Surgery, Wakeman Gen. Hosp., Atterbury, Ind.); Private Practice, Miami Beach, Fla., 1945-1950; *Veteran Resident in Neuropsychiatry, Duke Hospital, June 1950; Assistant, Veteran Training Program, September 1950—*

D. K. ADAMS, *Consultant. Professor of Psychology.*JOHN GILLIN, *Consultant. Professor of Anthropology, Univ. of N. C.*WESTON L'ABARRE, *Consultant. Assistant Professor of Anthropology.*KATHARINE R. LYMAN, *Social Worker.*EVALYN ABSHEAR LYNCH, *Social Worker in Psychosomatic Medicine.*JEANNE R. SHIRK, *Social Worker.*FLORRIE GARRETT, *Psychologist, Child Guidance Clinic.*MARJORIE M. HOBBS, *Psychologist, Child Guidance Clinic.*SANFORD GOLDSTONE, *Psychologist.*SUE WARREN LITTLE, *Psychologist.*BEN BARGER, *Psychologist.*ED FRIEDMAN, *Psychologist.*WALTER G. KLOPPER, *Clinical Psychologist in Psychosomatic Medicine and Lecturer in Psychology.*

## FELLOWS IN PSYCHOSOMATIC MEDICINE

J. RICHARD COMPTON, A.B., M.D., *Fellow in Psychosomatic Medicine.*

A.B., Wash. Univ., St. Louis, Mo., 1940; M.D., Wash. Univ. School of Med., 1943; Rotating Internship, Union Meml. Hosp., Baltimore, Md., Jan. 1944-Sept. 1944; Asst. Res. in Med., Hosp. for Women of Maryland, Baltimore, Oct. 1944-June 1945; Res. in Med., Hosp. for Women of Maryland, Baltimore, July 1945-March 1946; 1st Lt. U. S. Army Med. Corps, April 1946; Walter Reed Genl. Hosp., June 1946-June 1947; Capt. (temp.), M.C., May 1947; Chief, Med. Service, 377 Sta. Hosp., Korea, Sept. 1947-May 1948; Asst. Res. in Pathology, Fitzsimmons Genl. Hosp. (Army), Denver, Colo., July 1948-June 1949; Capt., M.C., Regular Army (permanent), Aug. 1948; Internal Med. (also Chief, Laboratory Service), Fort Knox Army Hosp., Ky., July 1949-June 1950; *Fellow in Psychosomatic Med., Duke Hospital, July 1950-June 1951; Major, M.C. (temp.), Sept. 1950.*



WALTER SIDNEY EASTERLING, B.S., M.D., *Fellow in Psychosomatic Medicine.*

B.S., M.D., Univ. of Ark., 1946, 1947; Rotating Internship, Hurley Hosp., Flint, Mich., 1947-1948; Ass't. Res. in Med., Univ. Hosp., Little Rock, Ark., 1948-1949; Ass't. Res. in Endo., Duke Hosp., 1949-1950; *Fellow in Psychosomatic Medicine, Duke Hospital, 1950—*

#### GRADUATE STUDENTS

TANASH H. AYOYNATAN, P.C.N., Univ. of Istanbul, 1937; M.D., Univ. of Istanbul, 1944.

First Lieutenant in the Medical Corps of the Turkish Army from 1944-1947; Private General Practice, American Clinic, Talas, Kaysevi, Turkey, 1947-1948; Dix Hill State Hospital, Raleigh, N. C., 1948-August 1949; *Graduate Student in Neuropsychiatry, Duke Hospital, August 1949—*

Instruction starts in the first year with an introductory course in psychiatry. In the second year, methods of psychiatric examination and a general presentation of the main reaction types are given. Each third-year student has a two-week clerkship on the psychiatric ward, and in the fourth year patients are worked up in the out-patient clinic for a period of three and a half weeks. A neuropsychiatric amphitheater clinic is held weekly throughout the year for third- and fourth-year students. Elective courses in neuropsychiatric methods of research, neurophysiological aspects of neuropsychiatry, psychosomatic medicine, psychoanalysis in medicine, and principles of psychotherapy are offered to fourth-year students. Students are invited to attend the staff case conferences, the psychosomatic conferences and the conferences on neuropsychiatric disorders of childhood. Emphasis is placed upon the close relationship of psychiatry to other branches of medicine and the social sciences. Internships are available in neuropsychiatry with the expectation that they will lead to progressively greater interest in the neuropsychiatric problems encountered on all other services in the Hospital. Graduate training in psychiatry meeting the requirements of the American Board of Psychiatry and Neurology is given. Regular courses in conjunction with the Veterans Administration training program are available. Investigation is encouraged.

### *Surgery*

DERYL HART, A.B., A.M., M.D., *Professor of Surgery and Chairman of the Department.*

A.B. and A.M., Emory, 1916 and 1917; M.D., Johns Hopkins, 1921; Int. in Surg., Ass't. Res. in Surg. Path., Ass't. Res. and Res. in Surg., and Assoc. Surg., Johns Hopkins Hosp., 1921-1930; Ass't. in Path., Instr., and Assoc. in Surg., Johns Hopkins Med. Sch., 1922-1930; *Surgeon, Duke Hospital, 1930—*

CLARENCE ELLSWORTH GARDNER, JR., A.B., M.D., *Professor of Surgery.*

A.B., Wittenburg, 1924; M.D., Johns Hopkins, 1928; Int. and Ass't. Res., Johns Hopkins Hosp., 1928-1930; Ass't. in Surg., Johns Hopkins Med. Sch., 1929-1930; Res. in Surgery and Associate Surgeon, Duke Hosp., 1930-1942; Col., Chief of Surg. Serv., 65th (U. S.) Gen. Hosp., 1942-1945; *Associate Surgeon, Duke Hospital, 1945—*

KEITH SANFORD GRIMSON, B.A., B.S., M.D., *Professor of Surgery.*

B.A. and B.S., North Dakota, 1930 and 1931; M.D., Rush Med. Coll., 1933; Int., Presbyterian Hosp., Chicago, 1933-1935; Ass't. Res., Res. and Instr. in Surg., Chicago, 1935-1942; *Assistant Surgeon, Duke Hospital, 1942—*

KENNETH LEROY PICKRELL, M.D., *Professor of Plastic Surgery.*

M.D., Johns Hopkins, 1935; Int., Ass't. Res. and Res. in Surg., Johns Hopkins Hosp., 1935-1944; *Assistant Surgeon, Duke Hospital, 1944—*

WILL CAMP SEALY, B.S., M.D., *Assistant Professor of Surgery, in Charge of Division of Thoracic Surgery.*

B.S. and M.D., Emory Univ., 1933 and 1936; Int. Surg., Ass't. Res. and Res., Duke Hosp., 1936-1942; Capt., Med. Corps, U. S. Army, 1942-1944; Chief, Surg. Service, 124th Gen. Hosp. and Lawson Gen. Hosp., 1944-1946; *Assistant Surgeon, Duke Hospital, 1946—*

JOSEPH W. BEARD, B.S., M.D., *Professor of Surgery in Charge of Experimental Surgery, and Associate Professor of Virology.*

B.S., Chicago, 1926; M.D., Vanderbilt, 1929; Ass't. and Instr. in Surg., Vanderbilt Univ. Med. Sch., 1930-1932; Int., Ass't. Res. and Res. in Surg., Vanderbilt Univ. Hosp., 1929-1932; Ass't. in Path. and Bact., Rockefeller Instit. for Med. Research, New York City, 1932-1935; Assoc. in Path. and Bact., Rockefeller Instit. for Med. Research, Princeton, 1935-1937; *Assistant Surgeon, Duke Hospital, 1937—*

HERMAN MAX SCHIEBEL, A.B., M.D., *Associate in Surgery.*

A.B. and M.D., Johns Hopkins, 1929 and 1933; Int., Ass't. Res. and Res. in Surg., Duke Hosp., 1933-1939; Surgeon-in-Chief, Lincoln Hosp., 1940—; Attending Surgeon, Watts Hosp., 1940—; *Assistant Surgeon, Duke Hospital, 1939—*

BARNES WOODHALL, A.B., M.D., *Professor of Neurosurgery.*

A.B., Williams, 1926; M.D., Johns Hopkins, 1930; Int., Ass't. and Res. in Surg., Johns Hopkins Hosp., 1930-1937; Ass't. and Instr. in Surg., Johns Hopkins Med. Sch., 1931-1937; Neurosurgeon, Duke Hosp., 1937-1943; Lt. Col., Med. Corps, U. S. Army, 1943-1945; *Neurosurgeon, Duke Hospital, 1943—*

GUY LEARY ODOM, M.D., *Associate Professor of Neurosurgery.*

M.D., Tulane, 1933; Int., Rotat., East Louisiana State Hosp., 1934-1937; Res. Fellow, Path. Fellow, Int. and Res. in Neuro. and Neurosurg., Montreal Neurol. Instit., 1937-1942; Clin. Instr. in Neurosurg., L. S. U. Med. Sch., 1942-1943; *Assistant Neurosurgeon, Duke Hospital, 1943—*

WILLIAM BANKS ANDERSON, A.B., M.D., *Professor of Ophthalmology.*

A.B., North Carolina, 1920; M.D., Johns Hopkins, 1924; Int., Union Mem. Hosp., Balto., 1924-1925; Int., Mass. Eye and Ear Infirmary, 1925-1927; *Ophthalmologist, Duke Hospital, 1930—*

WATT WEEMS EAGLE, A.B., M.D., *Professor of Otolaryngology.*

A.B., North Carolina, 1918; Grad. Stud., North Carolina, 1918-1919; M.D., Johns Hopkins, 1925; Int., Church Home and Infirmary, Baltimore, 1925-1926; Int., Ass't. Res. and Res. in Laryngol., Johns Hopkins Hosp., 1926-1929; Ass't. and Instr. in Laryngol., Johns Hopkins Med. Sch., 1927-1930; *Otolaryngologist, Duke Hospital, 1930—*

RALPH A. ARNOLD, B.A., M.D., *Assistant Professor of Otolaryngology and Ophthalmology.*

B.A., Rochester, 1932; M.D., Buffalo, 1936; Int. in Stud. Health, and Int., Ass't. Res. and Res. in Otolaryngology, Duke Hosp., 1937-1941; Assoc. in Oto. and Ophthal., 1941-1942; Major, MC, AUS, 1942-1946; *Assistant Otolaryngologist and Ophthalmologist, Duke Hospital, 1946—*

FREDERICK W. STOCKER, M.D., *Associate Professor of Ophthalmology.*

M.D., Bern, 1918; Vol. Ass't., Univ. Eye Clinic, Munich, 1916-1917; Int. and Res., Univ. of Bern Eye Clinic, 1918-1921; Eye Path., Instit. of Ophth., Presbyterian Hosp., New York, 1941-1942; 1943—

GEORGE BURTON FERGUSON, M.D., M.Sc. (Med.), *Associate in Bronchoscopy.*

M.D., Jefferson, 1932; M.Sc. (Med.), Pennsylvania, 1936; Res. Phys., Jefferson Med. Coll. Hosp., 1932-1934; *Bronchoscopist, Duke Hospital, 1937—*

LENOX DIAL BAKER, M.D., *Professor of Orthopaedic Surgery.*

M.D., Duke, 1933; Int. in Orth. Surg. and in Gen'l. Surg.; Ass't. Res. in Orth. Surg., and Res. in Orth., Johns Hopkins Hosp., 1933-1937; Res., Children's Hosp. Sch., 1936; Ass't. and Instr., Orth. Surg., Johns Hopkins Med. Sch., 1935-1937; *Orthopaedist, Duke Hospital, 1937—*

RICHARD BEVERLY RANEY, A.B., M.D., *Associate in Orthopaedics.*

A.B., North Carolina, 1926; M.D., Harvard, 1930; Int. in Surg., Surg. Pathologist, Ass't. Res. and Assoc. Res. in Surg., Strong Mem. Hosp., 1930-1934; Res. in Orth. and Assistant Orthopaedist, *Duke Hospital, 1934—*

EVERETT I. BUGG, JR., M.D., *Instructor in Orthopaedics.*

B.S., Duke, 1935; M.D., Johns Hopkins, 1937; Int. in Surg., Duke Hosp., 1937-1938; Ass't. Res. and Res. in Orthop., Johns Hopkins Hosp., 1938-1941; 1946—

JULIAN E. JACOBS, M.D., *Lecturer in Orthopaedics.*

M.D., Nebraska, 1935; Ass't. Res. and Res. in Orthop., Duke Hosp., 1936-1938

CHARLES EDWIN IRWIN, M.D., *Lecturer in Orthopaedic Surgery.*

M.D., Emory, 1932; Int., Piedmont Hosp., 1932-1933; Res., Georgia Warm Springs Foundation, 1933-1936; 1946—



OSCAR LEE MILLER, M.D., *Lecturer in Orthopaedic Surgery.*

M.D., Emory, 1912; Int. and Res., Piedmont Hosp., 1912-1914; Res., Scottish Rite Hosp. for Crippled Children, 1915-1917; U. S. Army, 1917-1919; Assoc. Prof. of Orthopaedic Surgery, Emory Univ., 1919-1921; Chief Surgeon, N. C. Orthopaedic Hosp., 1921-1932; Consulting Orthopaedic Surgeon, N. C. Orthopaedic Hospital, 1932; Attending Orthopaedic Surgeon, Charlotte Sanatorium, Mercy Hosp., 1923-1941; Chief, Div. of Orthopaedic Surgery, Charlotte Mem. Hosp., 1941; 1946—

W. M. ROBERTS, *Lecturer in Orthopaedics.*JOSEPH WARREN WHITE, A.B., M.D., *Lecturer in Orthopaedic Surgery.*

A.B. and M.D., Harvard, 1913 and 1917; U. S. Naval Medical School, 1919; Res. in Orthopaedics, Carney Hosp., 1919-1920; Visiting Orthopaedic Surgeon, Mass. Gen. Hosp., 1923-1924; Chief, Orthopaedic Service, U. S. Naval Hosp., 1920-1924; Chief Surgeon, Shriners Hospitals, Honolulu, T. H., 1924-1927; Chief Surgeon, Queen's Hospital, Honolulu, 1925-1927; Chief Surgeon, Shriners Hospital, Greenville, S. C., 1927; Chief, Orthopaedic Service, Greenville Gen. Hosp., 1927—; 1946—

J. LEONARD GOLDNER, A.B., B.S., M.D., *Associate in Orthopaedics.*

A.B., Minn., 1939; B.S., M.D., Nebraska, 1941, 1943; Int. and Res. Surg., Univ. Hosp., Nebraska, 1943-1944; Ass't. Res., Orthop., Duke, 1946-1947; Ass't. Res. and Staff Member, Orthop., Warm Springs Foundation, 1947-1948; Ass't. Res. and Res., Orthop., Duke, 1949-1950; 1950—

ROBERT L. BENNETT, M.D., *Lecturer in Physical Medicine.*

B.S., U. of Pittsburgh, 1934; M.D., 1936; M.S. in Physical Med., Mayo Foundation, U. of Minnesota, 1941; Int., Mercy Hosp., 1936-1937; Fellow in Phys. Med., Mayo Foundation, 1937-1940; Ass't. Phys. Med., Mayo Clinic, 1939-1940; Ass't. Prof. Phys. Med., Georgia Warm Springs Foundation; Dir. Post-Graduate School, Georgia Warm Springs Foundation, 1941-1946; 1946—

EDWIN PASCAL ALVEA, S.B., M.D., *Professor of Urology.*

S.B., Princeton, 1919; M.D., Johns Hopkins, 1923; Int. in Med., Int. and Ass't. Res. in Surg., Ass't. Res. and Res. in Urol., Johns Hopkins Hosp., 1923-1929; Ass't. and Instr. in Surg., and Instr. in Urol., Johns Hopkins Med. Sch., 1925-1929; *Urologist, Duke Hospital, 1930—*

JOHN ESSARY DEES, B.S., M.D., *Associate Professor of Urology.*

B.S. and M.D., Virginia, 1930 and 1933; Int. and Ass't. Res., Johns Hopkins Hosp., 1933-1937, and Res. in Urol., Ancker Hosp., 1937-1938, and Johns Hopkins Hosp., 1938-1939; *Assistant Urologist, Duke Hospital, 1939—*

LOUIS CARROLL ROBERTS, B.S., M.D., *Instructor in Urology.*

B.S., Davidson, 1930; M.D., Duke, 1933; Int. in Surg., Ass't. Res. in Path., Ass't. Res., and Res. in Urol., Duke Hosp., 1933-1940; Major, Med. Corps, U. S. Army, 1941-1945; *Assistant Urologist, Duke Hospital, 1940—*

THEODORE W. ATWOOD, A.B., D.M.D., *Associate in Dentistry.*

A.B., Duke, 1928; D.M.D., Harvard, 1932; Int. in Dentistry, Johns Hopkins Hosp., 1932-1934; *Dentist, Duke Hospital, 1934—*

NORMAN F. ROSS, D.D.S., *Instructor in Dentistry.*

D.D.S., Temple, 1937; Int. in Dentistry, Duke Hosp., 1937-1938; Major, U. S. Army Med. Corps, 1942-1946; *Assistant Dentist, Duke Hospital, 1938—*

DOROTHY WATERS BEARD, R.N., *Research Associate in Surgery.*

R.N., Vanderbilt, 1929; Supervisor, Surg. Service, Vanderbilt Univ. Hosp., 1929-1931; Post-graduate Course in Surg., Charity Hosp., New Orleans, 1931-1932; 1938—

D. GORDON SHARPE, B.S., A.M., Ph.D., *Assistant Professor of Biophysics in Experimental Surgery.*

B.S., Rutgers, 1932; A.M. and Ph.D., Duke, 1937 and 1939; Research Physicist in x-ray and ultraviolet ray, Westinghouse Elec. & Mfg. Co., Bloomfield, N. J., 1932-1936; Research Fellow in Physics, Duke Univ., and Fellow in Surg., Duke Med. Sch., 1936-1939; *Biophysicist, Duke Hospital, 1939—*

IVAN W. BROWN, JR., A.B., B.S., M.D., *Associate in Surgery.*

A.B., Univ. of Rochester, 1936; B.S., M.D., Duke, 1940; Ass't. Anat. and Physio., Duke, January 1940-July 1940; Int. and Ass't. Res., Path., Duke, 1940-1942; Capt., U. S. Army Med. Corps, 1942-1945; Ass't. Res. and Instr., Surg., Duke, 1945-1948; Dir., Blood Bank, Duke, 1946—; Markle Scholar in Med. Sci., 1948—; Assoc. Med. Dir. (Part-time), Nat'l Blood Prog., Amer. Nat'l Red Cross, 1948-1949; Consultant, Nat'l Blood Prog., 1949—; *Associate in Surgery, Duke Hospital, 1945—*

HORACE W. BAKER, JR., A.B., M.D., *Instructor in Surgery.*

A.B., Univ. of N. C., 1941; M.D., Duke, 1944; Int. and Ass't. Res., Surg., Duke, 1944-1946; Capt., U. S. Army, M. C., 1946-1948; *Assistant Resident and Resident, Surgery, Duke Hospital, 1948—*

JOHN P. COLLINS, A.B., M.D., *Instructor in Surgery.*

A.B., M.D., Duke, 1941, 1944; Int. and Ass't. Res., Surg., Duke, 1944-1946; Capt., U. S. Army, M. C., 1946-1948; *Assistant Resident and Res., Surgery, Duke Hospital, 1948—*

THOMAS R. BROADBENT, A.B., M.D., *Instructor in Surgery.*

A.B., Brigham Young, 1943; M.D., Duke, 1946; *Intern, Assistant Resident and Resident, Surgery, Duke Hospital, 1946—*

RICHARD G. CONNAR, A.B., M.D., *Instructor in Surgery.*

A.B., M.D., Duke, 1941, 1944; Int. and Ass't. Res., Med., Duke, 1944-1946; Capt., U. S. Army, M.C., 1946-1948; *Intern and Assistant Resident, Surgery, Duke Hospital, 1948—*

ALFRED N. COSTNER, B.S., M.D., *Instructor in Ophthalmology.*

B.S., Univ. of N. C., 1940; M.D., Washington Univ., 1943; Int., Norfolk Gen'l. Hosp., 1944; Int., Ophth. and Otol., Duke, 1944-1945; Capt., U. S. Army, M.C., 1945-1947; Ass't. Res. and Res., Ophth. and Otol., Duke, 1947-1949; Grad. Stud., Harvard Postgrad. Med. Sch., 1949-1950; *Resident and Instructor, Ophthalmology and Otolaryngology, Duke Hospital, 1950—*

JAMES D. MOODY, A.B., M.D., *Associate in Surgery.*

A.B., M.D., Duke, 1941, 1945; *Intern, Assistant Resident and Resident, Surgery, Duke Hospital, 1945—*

WILLIAM W. SHINGLETON, A.B., M.D., *Associate in Surgery.*

A.B., Atlantic Christian Coll., 1939; M.D., Bowman Gray, 1943.

#### FELLOWS

JOHN P. ADAMS (Orthopaedics)\* B.S., Univ. of Mo., 1943; M.D., Washington Univ., 1945.

R. H. BELSER (Orthopaedics)\* B.S., Citadel, 1942; M.D., Duke, 1946.

ANTONIO BERRIOS (Orthopaedics)\* Univ. San Carlos de Guatemala, M.D., 1949.

JAMES R. BRANDON (Orthopaedics)\* M.D., Med. Coll. of Va., 1942.

RAPHAEL W. COONRAD (Orthopaedics)\* B.S., Davidson Coll., 1943; M.D., Duke, 1947.

RICHARD H. CORALES, JR., B.S., M.D., Tulane Univ., 1938, 1942; Damon Runyon Fellow in Neurosurgery.

WILLIAM T. DAVISON (Orthopaedics)\* B.S., Yale, 1942; M.D., Duke, 1944.

DON L. EYLER (Orthopaedics)\* B.S., M.D., Ohio State Univ., 1940, 1943.

DARIUS FLINCHUM (Orthopaedics)\* B.S., Hampden-Sydney Coll., 1941; M.D., Univ. of Va., 1944.

HERMAN A. GAILEY (Orthopaedics)\* A.B., Lafayette Coll., 1943; M.D., Johns Hopkins, 1946.

JOHN GLASSON (Orthopaedics)\* A.B., Duke, 1939; M.D., Cornell Univ., 1943.

GARY HOUGH, III (Orthopaedics)\* M.D., Harvard, 1948.

KENNETH L. JORDAN (Orthopaedics)\* M.D., N. Y. Univ., 1945.

F. C. McMANS (Orthopaedics)\* B.S., Univ. of New Mexico, 1944; M.D., Tulane, 1946.

LESLIE C. MEYER (Orthopaedics)\* A.B., B.S., M.D., Univ. of Nebr., 1940, 1943.

PAUL C. THOMPSON (Orthopaedics)\* A.B., M.D., Duke, 1942, 1945.

W. BARRON WITHERS (Orthopaedics)\* M.D., Duke, 1945.

FRANK R. WRENN, JR., A.B., M.D., Duke, 1943, 1946; Atomic Energy Commission Fellow.

#### GRADUATE STUDENTS (HOUSE STAFF)

##### Residents and Assistant Residents

CRAIG P. BADE (Ophthalmology and Otolaryngology), B.S., Univ. of Ala., 1946; M.D., Ala. Med. Coll., 1950.

BYRON M. BLOOR (Neurosurgery), B.S., Univ. of Idaho, 1942; M.D., Duke, 1945.

ALEXANDER W. BOONE (Urology), B.S., M.D., Duke, 1946.

JOHN C. BOVILL, B.S., Mich., 1939; M.D., Wayne, 1943.

FRANK H. CAMPBELL, M.D., Duke, 1946.

\* Fellows of the National Foundation for Infantile Paralysis.

- COURTLAND H. DAVIS, JR. (Neurosurgery), B.A., Geo. Washington Univ., 1941; M.D., Univ. of Va., 1944.
- BENJAMIN F. EDWARDS (Plastic), A.B., M.D., Geo. Washington Univ., 1943.
- JOHN R. EMLET, A.B., Dickinson, 1942; M.D., Duke, 1946.
- GEORGE D. GADBY (Ophthalmology and Otolaryngology), B.S., Univ. of S. C., 1944; M.D., Univ. of Ga., 1949.
- ROBERT J. HAGERTY, A.B., Harvard, 1939; M.D., Johns Hopkins, 1943.
- RICHARD P. KRATZ (Ophthalmology and Otolaryngology), A.B., Occidental Coll., 1942; M.D., Univ. of Sou. California, 1945.
- ROBERT F. LORENZEN (Ophthalmology and Otolaryngology), B.S., M.D., Duke, 1944, 1948.
- C. KEITH LYONS, M.D., Duke, 1946.
- GEORGE H. MCSWAIN, A.B., M.D., Vanderbilt, 1938, 1941.
- VICTOR A. POLITANO (Urology), B.S., Marshall Coll., 1940; M.D., Duke, 1943.
- ANTONIO RODRIQUEZ (Plastic), M.D., Central Univ. of Venezuela.
- FREDERICK K. SCHMIDT (Urology), M.D., Duke, 1944.
- CHARLES STAUFFER (Urology), A.B., M.D., Duke, 1937, 1941.
- BARNEY F. TIMMONS (Ophthalmology and Otolaryngology), B.S., Univ. of S. C., 1942; M.D., Med. Coll. of S. C., 1945.

#### INTERNS

- WILLIAM G. ANLYAN, B.S., M.D., Yale Univ., 1945, 1949.
- SAUL BOYARSKY (Urology), B.S., M.D., Univ. of Vermont, 1943, 1946.
- JULIAN S. BROCK, M.D., Duke, 1951.
- ROBERT S. CALDWELL, M.D., Univ. of Va., 1950.
- ALPHEUS M. COVINGTON, B.S., Wofford Coll., 1940; M.D., Duke, 1950.
- BENJAMIN H. FLOWE, M.D., Duke, 1949.
- NICHOLAS G. GEORGIADIS, D.D.S., Columbia Univ. Coll. of Phys. & Surg., 1944; M.D., Duke, 1950.
- ERNEST T. NEWELL, M.D., Duke, 1950.
- CHARLES R. ROWE, JR., B.S., Univ. of N. C., 1945; M.D., Vanderbilt U., 1950.
- BASIL L. TRUSCOTT, B.A., Drew Univ., 1939; M.A., Syracuse, 1940; M.S., Ph.D., M.D., Yale, 1942, 1943, 1950.
- WILLIAM F. WALKER, M.D., Duke, 1951.
- EDWARD S. WHITESIDES, M.D., Duke, 1951.

*General Surgery.* In the sixth quarter the students, during their course in physical diagnosis, attend clinics and demonstrations arranged to familiarize them with the techniques of examinations and diagnostic procedures used in general surgery and the surgical specialties. They also have the opportunity in this quarter to become familiar with certain basic principles in aseptic and atraumatic surgery and in isolation technique. The *junior* students, during their surgical quarter, attend ward rounds in surgery and the surgical specialties, act as clinical clerks on the wards and assist in the operative treatment of patients assigned to them. The surgical students in the *senior* year attend ward rounds in general surgery and the surgical specialties in the mornings and assist in the surgical out-patient clinics in the afternoon. Also in groups of two for the proportionate time available

they are assigned to the emergency division of the out-patient clinic where they assist in the diagnosis and care of urgent conditions.

A six days' concentrated course of training in the administration of anesthetic agents is open to twenty-four medical students each school quarter. Properly qualified students observe and administer anesthesia under direct supervision of staff anesthesiologists.

*Otolaryngological Division.* An introductory course of instruction in the use of otolaryngological instrument, with a review of normal anatomy, is given to second-year students in the sixth quarter. Clinics during one quarter of alternating years are given to junior and senior students: students during their pediatric quarter work in the otolaryngological out-patient clinic as assigned. Ward rounds are held separately each week for third- and fourth-year students. Patients are assigned to junior students during the surgical quarter.

*Ophthalmological Division.* During the sixth quarter second-year students receive instruction in elementary ophthalmology. During the senior pediatric quarter the students work in the ophthalmological out-patient clinic as assigned, and assist in the study and treatment of eye diseases. Especial emphasis is placed on the underlying medical and surgical conditions. Each student follows throughout his time in the out-patient clinic all patients assigned to him. For those who manifest an unusual interest in this specialty, provision will be made for more advanced work. Throughout the senior surgical quarter the students attend ophthalmological ward rounds for one hour each week. During either their third or fourth academic year clinics covering the more general neuro-ophthalmological and medical problems are given.

*Orthopaedic Division.* In the sixth quarter an introductory course is given. During the surgical quarters the junior and senior students attend weekly ward rounds of one hour each in orthopaedics and fractures. Amphitheater clinics are held every third quarter. Students in their senior surgical quarter are assigned in rotation to the orthopaedic out-patient clinic. These students also attend orthopaedic staff rounds at 5:30 P.M. Mondays through Fridays. An elective course in the treatment of fractures, limited to three students, is offered during the junior and senior surgical quarters. An elective course in physical therapy is also offered during these quarters. Arrangements may be made for students who so desire to do research or experimental work. They may also attend the state orthopaedic clinics as held.

*Urologic Division.* In the sixth quarter, second-year students are given a course of lectures and practical demonstrations in urologic physical diagnosis in the normal individual student. Ward rounds on urologic patients are given every Saturday at 8:30 A.M. for third- and fourth-year students in their surgical quarter. Small groups are selected from the senior surgical group of students and assigned in rotation to the urologic out-patient clinic. During one quarter of the



year, urologic clinics are given weekly for the junior and senior classes. These clinics deal with the affections of the male and female urinary tract and of the male genital tract. Clinics for urethroscopic and cystoscopic investigation and for the more technical methods of urologic diagnosis and treatment are held Monday, Wednesday, and Thursday from 1:30 to 5:00 P.M. and Tuesdays and Thursdays from 9:30 A.M. to 12:30 P.M. throughout the year. X-ray conferences on all urologic cases are held Tuesday, Thursday, and Saturday mornings from 8:30 to 9:30 and are followed by staff rounds. Three senior students may select one of these cystoscopic clinics, x-ray conferences, and staff rounds as an elective. *The Urologic Journal Club* meets each Monday from 4:30 to 6:30 P.M., and members of the staff review their respectively assigned journals. Interested students are welcome.

*Neurosurgical Division.* During all four quarters, separate weekly ward rounds are held for the junior and senior surgical groups. Emphasis in these rounds is placed upon the recognition of neurosurgical problems, followed by observation of the operative and post-operative procedures. Weekly x-ray and pathological conferences are held, and these may be attended by interested individuals.

*Division of Plastic Surgery.* Weekly ward rounds are given to familiarize both third- and fourth-year students with the principles and practice of plastic and oral surgery. Ward patients are assigned to the third-year surgical students and the fourth-year surgical students work up patients in the out-patient clinic. Each Tuesday and Thursday afternoon, an opportunity is afforded interested students to observe moulage and cast work, cosmetic restoration of color, the making of prosthetic appliances, etc. This work is done under the direction of Mr. Elon H. Clark, of the Department of Medical Illustration.

*Division of Thoracic Surgery.* During the academic year ward rounds, lectures and demonstrations are held to acquaint the third- and fourth-year students with the principles and practice of surgery of the chest. The anatomy and physiology of the respiration and circulation are reviewed and their application to thoracic surgery is stressed. X-ray diagnosis is emphasized and frequent pathology conferences are held to give the students a well-rounded knowledge of the surgical diseases of the chest.

*Division of Anesthesiology.* Junior students, during their surgical quarter, are given a series of eleven lectures by the medical anesthesiologists. Following a brief history of anesthetic drugs, the response of the body to such drugs is discussed. The physiological basis of the reactions encountered in the operating room is stressed and the rational for choice of agents for various patients is presented. A six days' concentrated course of training in the administration of anesthetic agents is open to twenty-four senior medical students each school



quarter. These students observe and administer anesthetics under the supervision of staff anesthetists, see page 60.

*Dentistry.* Second-year students, in the sixth quarter, are instructed in the principles of dentistry.

## *Radiology*

ROBERT JAMES REEVES, A.B., M.D., *Professor of Radiology and Chairman of the Department.*

A.B. and M.D., Baylor, 1920 and 1924; Int., Baylor Hosp., 1924-1925; Res. in Roentgenol., Mass. Gen'l. Hosp., 1925-1926; Ass't. Attending Phys. in Roent. Ray Dept., Presbyterian Hosp., and Med. Center, N. Y., 1926-1930; Instr. in Med., Columbia Med. Sch., 1925-1930; *Radiologist, Duke Hospital, 1930—*

GEORGE JAY BAYLIN, A.B., M.D., *Professor of Radiology and Associate in Anatomy.*

A.B., Johns Hopkins, 1932; M.D., Duke, 1937; Ass't. in Anat., Duke Med. Sch., 1934-1937; Int. in Surg., Sinai Hosp., Balto., 1937-1938; Voluntary Ass't. in Path., Guy's Hosp., London, Sept., 1938-Feb., 1939; Instr. in Anat., Duke Med. Sch., Ass't. Res., and Res. in Rad., and *Associate Radiologist, Duke Hospital, 1939—*

\*JOHN C. GLENN, A.B., M.D., *Assistant Professor of Radiology.*

A.B., Central College, 1940; M.D., Duke, 1943; Int., Surg., Duke, 1944; Ass't. Res. and Res. in Rad., Duke, 1944-1946; U. S. Navy (Lt. jg), MC, USNR, 1946-1948; Instr. in Rad. in Charge of Radiation Therapy, Johns Hopkins Hosp., 1948-1949; *Assistant Radiologist, Duke Hospital, 1949—*

EUGENE HAYWARD CUMMINGS, A.B., M.D., *Instructor in Radiology.*

A.B., Univ. of Fla., 1941; M.D., Columbia Coll. of Phys. and Surg., 1944; Rot. Int., Hartford Hosp., 1945-1946; U. S. Army, M.C., 1946-1947; Res., Med., Doctor's Hosp., N. Y., 1947; Res. in Radio., Hartford Hosp., 1947-1951; *1951—*

JOHN B. CAHOON, JR., R.T., A.S.X.T., *Technical Instructor.*

HERMAN L. HASSELL, R.T., *Technical Instructor.*

BETTY MASTERSON, R.T., *Technical Instructor.*

### GRADUATE STUDENTS (HOUSE STAFF)

#### RESIDENTS IN RADIOLOGY

IRA E. BELL, B.S., Western Kentucky Univ., 1942; M.D., Univ. of Ga., 1945.

JOHN E. WEAR, A.B., Univ. of Ala., 1942; M.D., Northwestern, 1945.

#### ASSISTANT RESIDENTS AND ASSISTANTS IN RADIOLOGY

ALBERT L. ALLEN, A.B., M.D., Med. Coll. of S. C., 1933.

AUBREY P. HORNSBY, B.S., Univ. of Ala., 1941; M.D., Columbia Univ., 1946.

REGINALD H. JOHNSON, JR., B.S., Univ. of Pittsburgh, 1941; M.D., Duke, 1949.

LOWELL S. MILLER, B.S., M.D., Duke, 1945.

ROBERT L. PEDERSON, B.S., M.D., Univ. of Minn., 1943, 1946.

ROBERT L. PINCK, A.B., Washington and Lee, 1942; M.D., Duke, 1946.

ALLEN TAYLOR, B.S., M.D., Duke, 1943, 1947.

The student teaching schedule in roentgenology consists of a course in roentgen diagnosis and a course in therapeutic radiology. The first is offered during each scholastic quarter on Tuesday and Thursday of each week. The fundamental physics of x-ray is discussed, with the chief emphasis being placed upon the anatomical, pathological and physiological bases for the interpretation of x-ray films. The course is conducted in seminar fashion and no formal lectures are given. The students participate in and lead discussions with the instructor serving as the moderator. An attempt is made to acquaint the student with

\* Resigned, January, 1951.

the aids of roentgenology in diagnostic problems. The correct use of x-rays in diagnosis is stressed.

Therapeutic radiology is given one hour weekly during each quarter. At these sessions the general problem of the treatment of benign, inflammatory and malignant lesions by x-ray and radium is discussed and the accepted views of the combination of these therapeutic agents with surgery is stressed. Representative cases are demonstrated, and the follow-up results are particularly stressed.

A limited number of senior students are permitted to attend routine film reading sessions in the Department of Radiology. They are also instructed in the fundamentals of fluoroscopic examinations and shown the many pitfalls of the inexperienced fluoroscopist.

A number of conferences with the resident house staff are conducted throughout the year. Each Monday from 8:30 to 9:30 A.M. a session with the ear, nose and throat staff is held, during which the roentgen and operative findings are correlated. Each Wednesday from 11:30 to 12:30 A.M. a pediatric conference is held at which current cases are discussed and clinical and x-ray findings are given. On alternate Wednesdays from 5:00 to 6:00 P.M. conferences are held with the surgical and medical house staffs and all cases with significant x-rays are presented for general discussion. The neurosurgical staff meets with members of the x-ray department every Saturday from 10:00 to 11:00 A.M. for a discussion of all cases that have been studied by the department.

Each Thursday afternoon and Wednesday evening a conference is held by the members of the x-ray staff and visiting radiologists. Difficult cases are brought up for discussion and diagnosis.

## *Obstetrics and Gynecology*

**BAYARD CARTER, A.B., B.A., M.A., M.D.,** *Professor of Obstetrics and Gynecology and Chairman of the Department.*

A.B., Delaware, 1920; B.A. and M.A., Oxford, 1923 and 1924; M.D., Johns Hopkins, 1925; Member Obs. and Gyn. Staff of New Haven Hosp. and Yale Med. Sch., 1925-1929; Assoc. Prof. Obs. and Gyn., and Head of Dept., Univ. of Va. Med. Sch., 1929-1931; *Obstetrician and Gynecologist, Duke Hospital, 1931—*

**EDWIN CROWELL HAMBLEN, B.S., M.D.,** *Associate Professor of Obstetrics and Gynecology and Professor of Endocrinology.*

B.S. and M.D., Virginia, 1921 and 1928; Ass't. and Instr. in Pharmacol. and Materia Medica, Baylor Med. Coll., 1922-1926; Int. and Res., Obs. and Gyn., Univ. of Va. Hosp., 1928-1930; Clin. Instr. in Obs. and Gyn., Univ. of Va. Med. Dept., 1930-1931; *Associate Obstetrician and Gynecologist; and Endocrinologist, Duke Hospital, 1931—*

**ROBERT ALEXANDER ROSS, B.S., M.D.,** *Professor of Obstetrics and Gynecology.*

B.S., North Carolina, 1920; M.D., Pennsylvania, 1922; Res. Physician, Univ. of Pa. Settlement House, 1921-1922; Int., Episcopal Hosp., Phila., 1922-1924; Int. and Res., Kensington Hosp. for Women, 1923-1925; Comdr., Med. Corps. U. S. Navy, 1942-1945; *Associate Obstetrician and Gynecologist, Duke Hospital, 1930—*

**WALTER LEE THOMAS, JR., A.B., A.M., M.D.,** *Associate Professor of Obstetrics and Gynecology.*

A.B., Lynchburg, 1926; A.M. and M.D., Virginia, 1927 and 1931; Int., Virginia-Mason Hosp., 1931-1932; Ass't. Res. and Res. in Obs. and Gyn., Duke Hosp., 1932-1935;

Assistant Obstetrician and Gynecologist, Henry Ford Hosp., Detroit, 1936-1937; Ass't. Obstetrician and Gynecologist, Duke Hosp., 1937-1942; Major, Med. Corps, 65th (U. S.) Gen. Hosp., 1942-1945; *Assistant Obstetrician and Gynecologist, Duke Hospital, 1945—*

MARVIN PIERCE RUCKER, A.M., M.D., LL.D., *Lecturer in Obstetrics and Gynecology.* A.B., A.M., and LL.D., Randolph-Macon, 1899 and 1938; M.D., Johns Hopkins, 1903; N. Y. Lying-In Hosp.; Demonstrator in Physiol., Pharmacol., Histol., Path., Embryol. and Obs., and Assoc. in Obs., and Assoc. Prof. of Obs., Med. Coll. of Va., 1903-1930; Obstetrician, Johnson-Willis Hosp., Richmond, Va., 1930; 1941—

ROBERT NOWELL CREADICK, A.B., M.D., *Assistant Professor of Obstetrics and Gynecology.*

A.B., Wesleyan Univ., 1933; M.D., Yale, 1937; Int., Hartford Hosp., 1937-1939; Ass't. Res. and Res., Duke Hosp., 1939-1943; Major, Med. Corps, U. S. Army, 1943-1946; Chief, Ob. Section, Walter Reed Gen. Hosp., 1945-1946; 1946—

VIOLET HORNER TURNER, B.A., M.D., *Instructor in Obstetrics and Gynecology.*

B.A., Univ. Hawaii, 1936; M.D., Univ. Chicago, 1940; Int., Rotat., Cincinnati General, 1940-1941; Ass't. Res., Endocrine, Duke Hospital, 1941; Int., Obstetrics, 1942, Lying-In Hosp., Chicago; Ass't. Res., Endocrine, Duke, 1943; Ass't. Res., Ob.-Gyn., 1943-1944; Res., 1944-1945; 1945—

ELEANOR BEAMER EASLEY, B.A., M.A., M.D., *Associate in Obstetrics and Gynecology.* B.A., Idaho, 1928; M.A., Iowa, 1929; M.D., Duke, 1934; Int. and Ass't. Res. in Med., and Int., Ass't. Res., and Res. in Obstetrics and Gynecology, and *Assistant Obstetrician and Gynecologist, Duke Hospital, 1934—*

WILLIAM A. GRAHAM, *Instructor in Obstetrics and Gynecology.*

M.D., Univ. of Pa., 1932; Int., Union Mem. Hosp., 1932-1933; Int., Royal Victoria Hospital, 1933-1934; Res., Woman's Hosp., 1934-1937; 1938—

TROGLER F. ADKINS, *Instructor in Obstetrics and Gynecology.*

M.D., Duke, 1936; Int. in Surg., Duke, 1936-1937; Int., Ass't. Res., and Res. in Ob. and Gyn., and *Assistant Obstetrician and Gynecologist, Duke Hospital, 1938—*

RICHARD L. PEARSE, M.D., *Instructor in Obstetrics and Gynecology.*

M.D., Harvard, 1931; House Officer, Free Hosp. for Women, 1931; Int., Mass. Gen. Hosp., 1932-1934; Ass't. Res., Providence Lying-In Hosp., 1935; Ass't. Res. and Res. in Ob. and Gyn., Duke Hospital, 1935-1938; 1938—

KENNETH A. PODGER, A.B., M.D., *Instructor in Obstetrics and Gynecology.*

A.B., M.D., Duke, 1937 and 1941; Int. and Ass't. Res. in Med., Duke, 1941-1942; Lt., Med. Corps, U. S. Navy, 1942-1945; Ass't. Res. and Res., Duke, 1946-1948; 1946—

W. KENNETH CUYLER, B.A., M.A., Ph.D., *Research Instructor in Obstetrics and Gynecologic Laboratory Technics.*

B.A., Texas, 1923; M.A., Western Reserve, 1929; Ph.D., Duke, 1941; Dir. of Clin. Lab., Dept. of Endocrinol. and Metabolism, Cleveland Clinics, 1929-1938; 1938—

C. P. JONES, *Technical Research Instructor in Obstetrics and Gynecology.*

## FELLOWS

ARNOBIO CORONEL PADUA (Endocrinology), B.S., Liceo Lisandro Alvarado (Venezuela), 1941; M.D., Universidad Central de Venezuela, 1947.

ROSEMARY SCHREPPER (Endocrinology), A.B., Univ. of Kansas, 1944; M.D., Univ. of Kansas Med. Sch., 1947.

WELLS E. SAWTELLE (Endocrinology), M.D., Univ. of Oregon, 1945.

## GRADUATE STUDENTS (HOUSE STAFF)

### RESIDENTS AND ASSISTANT RESIDENTS

JOHN V. AREY, A.B., Univ. of N. C., 1942; M.D., Harvard, 1946.

HOWARD C. DUCKETT, JR., A.B., M.D., Duke, 1941, 1944.

JAMES M. INGRAM, JR., M.D., Duke, 1943.

WILLIAM R. KERR, M.D., Tulane, 1947.

LEONARD PALUMBO, M.D., Duke, 1944.

ROY T. PARKER, A.B., Univ. of N. C., 1941; M.D., Med. Coll. of Va., 1944.

CHARLES H. PEETE, JR., M.D., Harvard, 1947.

BENJAMIN J. PHILIPS, B.S., Davidson, 1942; M.D., Duke, 1945.

DOUGLAS P. RUCKER, M.D., Duke, 1950.

CLARENCE L. RUFFIN, A.B., Univ. of N. C., 1942; M.D., Duke, 1945.

## INTERNS

JAMES H. AUSTIN, M.D., Duke, 1951.

DANIEL A. MAIRS, M.D., Duke, 1950.

*Second-year* students receive seventeen hours of instruction in the fundamentals of obstetrics and gynecology during their course in physical diagnosis in the sixth quarter. Clinics and demonstrations for junior and senior students are held on Saturdays at 10:30 A.M. during the Autumn, Winter, and Spring Quarters and on Mondays at 11:30 A.M. in the Summer Quarter. During one quarter of the *junior* year each group of students attends ward rounds at 8:30 A.M. on Mondays, Wednesdays, and Saturdays; preoperative conferences at 8:30 A.M. on Tuesdays and Fridays; and the out-patient clinic at 1:30 P.M. five times weekly, for nine weeks. They also attend an endocrine clinic once a week for nine weeks during the junior year. The students also spend part of each day on the wards. *Senior* students, during their surgical quarter, have ward rounds on obstetrics and gynecology on Saturdays at 8:30 A.M.

*Elective* courses in the diagnosis and treatment of obstetric and gynecological conditions are offered for junior and senior students.

## Pediatrics

WILBURT CORNELL DAVISON, A.B., B.A., B.Sc., M.A., M.D., D.Sc., LL.D., *Dean of the School of Medicine and Professor of Pediatrics.*

A.B., Princeton, 1913; B.A., B.Sc., and M.A., Oxford, 1915, 1916, and 1919; M.D., Johns Hopkins, 1917; D.Sc., Wake Forest, 1932; LL.D., North Carolina, 1944; Int., Radcliffe Infirmary, 1915-1916; Capt., Med. Corps, A.E.F., 1917-1919; Ass't. Res. Assoc. Ped., Acting Pediatrician in Charge, Johns Hopkins Hosp., 1919-1927; Instr., Assoc. Assoc. Prof., Acting Head of Dept. of Ped., and Ass't. Dean, Johns Hopkins Med. Sch., 1919-1927; *Pediatrician, Duke Hospital, 1927—*

JEROME SYLVAN HARRIS, A.B., M.D., *Professor of Pediatrics and Associate Professor of Biochemistry.*

A.B., Dartmouth, 1929; M.D., Harvard, 1933; Med. House Officer, House of Good Samaritan, Biston, Oct., 1933-Jan., 1934; Int. in Med., Univ. of Chicago Clinics, 1934-1935; Int., Infants and Children's Hosp., Boston, 1935-1936; Ass't. Res. and Assistant Pediatrician, Duke Hosp., 1936-1942; Lt. Col., Med. Corps, U. S. Army, 1942-1945; *Assistant Pediatrician, Duke Hospital, 1936—*

ANGUS MCBRYDE, B.S., M.D., *Associate Professor of Pediatrics.*

B.S., Davidson, 1924; M.D., Pennsylvania, 1928; Int. and Res. in Ped., Univ. of Pa. Hosp., 1928-1930; Ass't. Res. in Ped., Johns Hopkins Hosp. and Ass't. in Ped., Johns Hopkins Med. Sch., 1930-1931; *Assistant Pediatrician, Duke Hospital, 1931—*

\*HARVEY GRANT TAYLOR, A.B., A.M., M.D., *Associate Professor of Pediatrics and Bacteriology, and Associate Dean.*

A.B., San Jose State, 1928; A.M., Stanford, 1929; M.D., Duke, 1940; Int. in Ped., Duke Hosp., 1940-1941; Ass't. Res. and Res. in Ped., Alfred I. duPont Instit., Nemours Found., Wilmington, Del., 1941-1943; Lt. Col., Med. Corps, U. S. Army, 1943-1946; *Assistant Pediatrician, Duke Hospital, 1940—*

JAY MORRIS ARENA, B.S., M.D., *Associate Professor of Pediatrics.*

B.S., West Virginia, 1930; M.D., Duke, 1932; Int. in Ped., Johns Hopkins Hosp., 1932-1933; Ass't. Res., Res., and *Assistant Pediatrician, Duke Hospital, 1933—*

SUSAN COONS DEES, A.B., M.S., M.D., *Associate Professor of Pediatrics.*

A.B., Goucher, 1930; M.D., Johns Hopkins, 1934; M.S., Minnesota, 1938; Int., Johns Hopkins Hosp., 1934-1935, and Ass't. Res. in Med., Strong Mem. Hosp., 1935-1936; Int. in Path., Balto. City Hosps., and Ass't. Johns Hopkins Protein Clinic, 1936-1937; Research Fellow in Ped., Univ. of Minnesota, 1937-1938; Ass't. Disp. Physician, Johns Hopkins Hosp., 1938-1939; *Assistant Pediatrician, Duke Hospital, 1939—*

\* On leave, 1950-1951.



ARTHUR HILL LONDON, JR., B.S., M.D., *Associate in Pediatrics.*

B.S., North Carolina, 1925; M.D., Pennsylvania, 1927; Int., Rotat., Methodist Episcopal Hosp., Phila., 1927-1928; Ass't. Res. in Ped., Children's Hosp., Cincinnati, 1928-1929; Chief Res., Children's Hosp., Phila., and Instr. in Ped., Pennsylvania Med. Sch., 1929-1930; *Assistant Pediatrician, Duke Hospital, 1932—*

PAUL FRANKLIN MANESS, A.B., M.D., *Instructor in Pediatrics.*

A.B., M.D., Duke, 1936, 1940; Rot. Int., Grady Hosp., 1940-1941; Ass't. Res., Steiner Clinic, 1941-1942; Lt. Cmdr., Med. Corps, Navy of U. S., 1942-1947; Ass't. Res., Ped., Duke, 1947-1949; 1947—

GEORGE WALLACE KERNODLE, A.B., M.D., *Instructor in Pediatrics.*

A.B., Elon Coll., 1941; M.D., Duke, 1944; Int., Ped., 1945; Ass't. Res., Ped., Children's Hosp., Cincinnati, O., 1945-1946; Ass't. Res., Ped., Duke, 1946-1947; 1946—

BAILEY DANIEL WEBB, A.B., M.S., Ph.D., M.D., *Instructor in Pediatrics.*

A.B., Greensboro Coll., 1933; M.S., Ph.D., U. North Carolina, 1939, 1941; M.D., Duke, 1946; Biochemist Coop. Nutritional Study, N. C. Bd. of Hlth. and Rockefeller Fdn., 1941-1944; Int., Ass't. Res., Ped., St. Louis Children's Hosp., 1946-1949; 1949—

ATALA THAYER SCUDDER DAVISON, A.B., M.D., *Instructor in Pediatrics.*

A.B., Bryn Mawr, 1915; M.D., Johns Hopkins, 1920; Ass't. in Bact., Am. Red Cross, A.E.F., 1917-1918; *Assistant Pediatrician, Duke Hospital, 1942—*

BENJAMIN SMITH SKINNER, *Instructor in Pediatrics.*

B.S., North Carolina, 1937; M.D., Washington, 1940; Int., Ped., St. Louis Children's Hosp., 1940-1941; Int. and Ass't. Res., Med., Duke, 1941-1942; Ass't. Res., Ped., St. Louis Children's Hosp., 1942-1944; Capt., Med. Corps, U. S. Army, 1944-1946; 1946—

ELEANOR JANE HERRING WOOTEN, *Instructor in Pediatrics.*

A.B., Greensboro, 1939; M.D., Duke, 1943; Int., Ped., Mass. Gen. Hosp., 1943; Int., Ped., Duke, 1943-1944; Ass't. Res., Ped., Mass. Gen. Hosp., 1944; Ass't. Res., Ped., Vanderbilt, 1944-1945; Ass't. Res., Ped., Los Angeles Children's Hosp., 1945-1946; 1946—

MILDRED M. SHERWOOD, R.N., *Instructor in Pediatrics, 1930—*

## GRADUATE STUDENTS (HOUSE STAFF)

## RESIDENTS AND ASSISTANT RESIDENTS (PEDIATRICS)

HARRY D. COX, B.S., William and Mary, 1943; M.D., U. of Va., 1946; 7/1/49—

WILLIAM J. A. DEMARIA, B.S., U. of Conn., 1944; M.D., Duke, 1948; 1/1/49—

DORIS A. HOWELL, A.B., Park Coll., 1944; M.D., C.M., McGill U., 1949; 7/1/51—

EDWARD P. KINGSBURY, JR., M.D., Duke, 1948; 4/1/49—

R. FRANKLIN POOLE, JR., M.D., Duke, 1947; 7/1/51—

MARY L. RUTLEDGE, B.S., M.A., Furman U., 1937, 1938; M.D., Temple, 1948; 7/1/50—

PAUL M. SARAZEN, JR., B.S., M.D., Duke, 1944, 1948; 7/1/50—

RAYMOND E. SCHIPKE, A.B., Colgate U., 1943; M.D., N. Y. Med. Coll., 1946; 7/1/49—

CHARLES F. SEYMOUR, B.S., U. of Fla., 1940; M.D., Duke, 1950; 1/1/50—

EILEEN C. SIMMONS, M.D., Woman's Med. Coll. of Pa., 1948; 7/1/50—

MARGARET P. SULLIVAN, B.A., Rice Inst., 1944; M.D., Duke, 1950; 7/1/50—

THOMAS E. WALKER, A.B., Davidson Coll., 1939; M.A., M.S., U. of N. C., 1941, 1942; M.D., Harvard, 1950; 7/1/50—

LOUIS C. ZANG, JR., M.D., Baylor, 1946; 7/1/49—

EDGAR E. MCCANLESS, A.B., Duke, 1945; M.D., U. of Pa., 1949; 7/1/50—

## INTERNS (PEDIATRICS)

LAURENA P. BOOKER, M.D., Duke, 1951; 3/17/51-6/30/51—

MARGARET L. CASON, B.S., Fla. State U., 1945; M.D., U. of Chicago, 1950; 7/1/50-6/30/51—

BEVERLY N. JACKSON, B.S., M.D., Duke, 1947, 1951; 1/1/51—

RUTH S. JOHNSON, B.S., Winthrop Coll., 1945; M.D., Bowman Gray, 1949; 7/1/51—

DAVID A. LOCKHART, B.A., Univ. of the South, 1943; M.D., Duke, 1951; 1/1/51—

A. DOUGLAS RICE, M.D., Duke, 1951; 3/17/51—



RUTH R. M. VINGIELLO, B.S., M.D., Duke, 1944, 1947; 7/1/51—

THADDEUS B. WESTER, A.B., M.D., Duke, 1946, 1951; 1/1/51—

#### INTERNS (OBSTETRICS-PEDIATRICS)

MARVIN A. BOWERS, JR., A.B., Lenoir-Rhyne Coll., 1944; M.D., U. of Louisville, 1950; 7/1/50—

DAVID E. DRAKE, M.D., Duke, 1951; 7/1/51—

*Junior* and *senior* students, during their medical quarters, have pediatric ward rounds on Saturdays, from 8:30 to 9:30 A.M. These *junior* students receive instruction in introductory pediatrics and the physical diagnosis of infants and children. The *senior* students are divided into three groups, each of which spends one quarter in pediatrics. During this quarter they are assigned daily as clinical clerks on the children's ward, nursery, and pediatric out-patient clinic, attend ward rounds at 8:30 A.M. Mondays and Fridays and 9:30 A.M. on Wednesdays; attend the staff conference at 8:30 A.M. on Wednesdays; attend child guidance clinic each Monday at 11:00 A.M.; attend conference on pediatric roentgenology each Tuesday at 11:30 A.M.; are instructed in the practical nursing of infants by Miss Sherwood on Fridays at 9:30 A.M.; and are taught the preparation of diets for infants and children by the Professor of Dietetics. Each student attends infant feeding clinics on Fridays during this quarter. Students may attend, on voluntary basis, the special pediatric clinics—nephritis, cardiac, allergy, and convulsive disorders. *Elective courses:* Senior students may spend two weeks in general practice with Instructors in General Practice. In addition to the six pediatric internships, there are four in which six months each are spent in obstetrics and pediatrics for graduates who plan to enter general practice. Seven assistant residencies and one residency are available.

### *Preventive Medicine and Public Health*

NORMAN FRANCIS CONANT, B.S., A.M., Ph.D., *Professor of Mycology and Associate Professor of Bacteriology.*

A. S. PEARSE, B.S., A.M., Ph.D., LL.D., *Professor of Zoology.*

DAVID TILLERSON SMITH, A.B., M.D., *Professor of Bacteriology, Chairman of the Department, and Associate Professor of Medicine.*

ELBERT LAPSLEY PERSONS, A.B., M.D., *Associate Professor of Medicine, Director of Student Health, and Associate Professor of Preventive Medicine and Public Health.*

JOHN E. LARSH, JR., A.B., M.S., Sc.D., *Associate in Parasitology.*

A.B. and M.S., Illinois, 1939 and 1940; Sc.D., Johns Hopkins, 1943; Professor of Parasitology, Univ. of N. C., 1943.

EDWARD G. MCGAVRAN, A.B., M.D., M.P.H., *Visiting Lecturer in Preventive Medicine and Public Health.*

A.B., Butler Univ., 1924; M.D., M.P.H., Harvard, 1928, 1935; Dean and Professor of Epidemiology, Sch. of Publ. Hlth., Univ. of N. C.

CECIL G. SHEPS, M.D., M.P.H., *Visiting Lecturer in Preventive Medicine and Public Health.*

M.D., Univ. of Manitoba, 1936; M.P.H., Yale, 1947; Assoc. Prof. of Publ. Hlth. Admin., Sch. of Pnbl. Hlth., and Res. Assoc. in the Inst. for Res. in Social Science, Univ. of N. C.

JOHN J. WRIGHT, A.B., M.D., M.P.H., *Visiting Lecturer in Preventive Medicine and Public Health.*

A.B., M.D., Vanderbilt, 1931, 1935; M.P.H., Johns Hopkins, 1939; Prof. of Publ. Hlth. Admin., Sch. of Publ. Hlth., Univ. of N. C.

WILLIAM C. GIBSON, B.S.C.E., M.P.H., *Visiting Lecturer in Preventive Medicine and Public Health.*

B.S.C.E., N. Y. Univ., 1936; M.P.H., Univ. of N. C., 1950; Instr. in Field Training, Sch. of Publ. Hlth., Univ. of N. C.

SIDNEY S. CHIPMAN, B.A., M.D.C.M., M.P.H., *Visiting Lecturer in Preventive Medicine and Public Health.*

B.A., Acadia Univ., 1924; M.D.C.M., McGill, 1928; M.P.H., Yale, 1947; Prof. of Maternal and Child Health, Sch. of Publ. Hlth., Univ. of N. C.

WILLIAM P. RICHARDSON, A.B., M.D., M.P.H., *Visiting Lecturer in Preventive Medicine and Public Health.*

A.B., Wake Forest Coll., 1926; M.D., Med. Coll. of Va., 1928; M.P.H., Johns Hopkins, 1933; Res. Prof. of Publ. Hlth. Admin., Sch. of Publ. Hlth., Univ. of N. C.

W. G. BROWN, A.B., *Instructor in Preventive Medicine and Public Health.*

A.B., North Carolina, 1932; Chemist, Water Dept., Durham, N. C.

ALBERT DERWIN COOPER, A.B., M.D., *Instructor in Medicine.*

JESSE HARRISON EPPERSON, B.S., *Instructor in Preventive Medicine and Public Health.*

B.S., Okla., 1914; Health Officer, Durham City and County, 1922; 1930—

D. M. WILLIAMS, B.S., *Lecturer in Preventive Medicine and Public Health.*

B.S., North Carolina, 1910; Superintendent of Water and Sewer Dept., Durham, N. C.

H. POPE, A.B., A.M., Ph.D., *Technical Instructor in Preventive Medicine and Public Health.*

*Preventive Medicine and Public Health.* In the freshman year there are four lectures given to provide some basic orientation predicated upon the fact that disease has a community as well as a personal aspect and that the social component of illness is an important force in the work of the doctor as well as in the life of the community. The student is introduced to disease as a mass or community problem and to medicine as a social institution.

In the sophomore year there is a series of lectures and discussions, totaling fifty-two hours, which outline in some detail the interrelationships between medicine and society. This course attempts to provide an understanding of the general principles governing the circumstances under which disease occurs and also the general principles used in the development of measures aimed at the control of disease, both communicable and non-communicable. The effect of the physical environment on human health is briefly discussed with special emphasis on the relationship of the practicing physician to environmental control programs and policies. An overview is given of the basic health problems at the various stages of life.

In alternate years, the senior and junior students meet together for eleven one-hour sessions. These sessions are devoted to discussions of the application of the principles of preventive medicine as they can

be applied by the physician in private practice. Attention is also directed to the role of community health and welfare agencies as adjuncts to the physician in the management of his individual patient. The case method of presentation and study is used, with groups of students acting as the panel of experts.

*Medical Parasitology.* This is a lecture and laboratory course given one morning a week in the fourth quarter. Most of the emphasis is placed on the symptomatology, diagnosis and therapy of the various helminthic and protozoal diseases in man; several periods are devoted to medical entomology.

## *Legal Medicine and Toxicology*

J. B. BRADWAY, *Professor of Law.*

E. C. BRYSON, *Associate Professor of Law.*

W. D. FORBUS, *Professor of Pathology.*

D. T. SMITH, *Professor of Bacteriology and Associate Professor of Medicine.*

H. M. TAYLOR, *Associate Professor of Biochemistry and Toxicology.*

This course embraces a discussion of the relation of physicians to legal criminal procedures, jurisdiction of the coroner and medical examiner, laws governing the dead human body, personal identity of the living and the dead, the medicolegal autopsy, traumatic injuries and fractures, rape, abortion, asphyxial death, homicidal, suicidal, and industrial poisoning, alcoholism, the examination of blood, stains, fibers, and the detection of malingering. The course is open to junior and senior students and is given in alternate years. Discussions of medicolegal problems for the house staff and senior students, and joint conferences of the medical and law students also are held.

## *Undergraduate Cancer Training Program*

(Supported by a grant in aid from the U. S. Public Health Service.)

### STAFF

*Coordinator:* WILEY D. FORBUS, M.D.

### *Operating Committee:*

CLARENCE E. GARDNER, M.D., *Associate Professor of Surgery.*

WAYNE RUNDLES, M.D., *Assistant Professor of Medicine.*

BAYARD CARTER, M.D., *Professor of Obstetrics and Gynecology.*

GEORGE BAYLIN, M.D., *Associate Professor of Radiology.*

*Social Service Worker:* ISABEL PELTON.

### *Secretaries:*

MRS. ESTELLA FRANKS.

MRS. JOYCE SHANKLE.

During the senior year, the students in surgery participate in the teaching sessions held by the Undergraduate Cancer Training Pro-

gram staff and the senior staff. These sessions are held five days a week, and an attempt is made to cover systematically the various regions in the body in respect to the tumors which arise in them. The viewpoints of the clinician, the radiologist, and the pathologist are presented and correlated at this time. The students themselves prepare seminars on theoretical subjects which have a direct bearing on the problem of neoplasia in general. This portion of the program is repeated each quarter throughout the year.

In addition, the Undergraduate Cancer Training Program staff participates in the teaching of neoplasia to the sophomore students. This is done as a supplementary program to the students as they are being taught the principles of neoplastic disease by the Department of Pathology. New material is presented to them and here the clinico-pathological approach to the problem of neoplasia has special emphasis. In this phase of the program it has not been possible to cover the entire body but selected regions are utilized.

# Committees of the School of Medicine



## EXECUTIVE COMMITTEE OF THE SCHOOLS OF MEDICINE AND NURSING

BAYARD CARTER  
W. C. DAVISON  
W. D. FORBES  
F. G. HALL  
PHILIP HANDLER

DERYL HART  
L. B. HOILMAN  
R. S. LYMAN  
J. E. MARKEE

ROSS PORTER  
D. T. SMITH  
E. A. STEAD, JR.  
FLORENCE K. WILSON

## COMMITTEE ON THE CURRICULUM

J. S. HARRIS  
(Chairman)  
N. F. CONANT

G. S. EADIE  
DERYL HART  
J. E. MARKEE

F. D. MCCREA  
E. A. STEAD, JR.

## COMMITTEE ON THE LIBRARY

MRS. J. C. TRENT  
(Chairman)

F. W. BERNHEIM  
F. L. ENGL

BAYARD CARTER  
R. B. RANEY

## COMMITTEE ON ADMISSION

J. E. MARKEE  
(Chairman)  
MRS. F. H. SWETT  
(Secretary)

N. F. CONANT  
R. N. CREADICK  
W. M. NICHOLSON

G. L. ODOM  
F. G. HALL

## COMMITTEE ON EXAMINATIONS

W. D. FORBES  
(Chairman)

D. T. SMITH

## COMMITTEE ON INTERNSHIPS

K. S. GRIMSON  
(Chairman)

W. C. DAVISON

\*H. G. TAYLOR

## BEAUMONT COMMITTEE

J. W. BEARD  
(Chairman)

DERYL HART

D. T. SMITH

## COMMITTEE ON STUDENT TECHNICIANS

H. M. TAYLOR  
(Chairman)

D. T. SMITH  
WAYNE RUNDLES

GEORGE MARGOLIS

## COMMITTEE ON THE OUT-PATIENT CLINIC

J. M. RUFFIN  
(Chairman)

C. E. GARDNER, JR.  
F. R. PORTER

R. A. ROSS

\* Leave of absence, 1950-1951.



## COMMITTEE ON HOSPITAL RECORDS

J. L. CALLAWAY (Chairman)	JESSIE HARNED BUFKIN H. MILDRED CRAWLEY	W. L. THOMAS, JR. LESLIE B. HOHMAN
L. D. BAKER	C. E. GARDNER, JR.	J. S. HARRIS
F. R. PORTER		

## COMMITTEE ON MEDICAL ART AND ILLUSTRATION

J. W. BEARD (Chairman)	J. E. MARKEE
---------------------------	--------------

## COMMITTEE ON PHYSICAL THERAPY

L. D. BAKER (Chairman)	R. S. LYMAN HELEN L. KAISER	F. R. PORTER ELLEN HUCKABEE
F. G. HALL	E. L. PERSONS	

## COMMITTEE ON SOCIAL SERVICE

W. M. NICHOLSON (Chairman)	E. L. PERSONS F. R. PORTER	K. S. GRIMSON JANET WIEN
M. H. GREENHILL		

## COMMITTEE ON THE BORDEN AWARD

J. E. MARKEE (Chairman)	J. W. BEARD J. P. HENDRIX	K. LER. PICKRELL
----------------------------	------------------------------	------------------

## HOSPITAL ADMINISTRATIVE COMMITTEE

BAYARD CARTER	R. S. LYMAN	D. T. SMITH
W. C. DAVISON	ELSIE W. MARTIN	E. A. STEAD, JR.
DERYL HART	L. B. HOHMAN	FLORENCE K. WILSON
W. D. FORBUS	J. M. PYNE	DEWITT WRIGHT

# Staff of Duke Hospital



## ADMINISTRATIVE AND TECHNICAL STAFF

- F. R. PORTER, A.B., *Superintendent.*  
J. M. PYNE, B.S., *Assistant Superintendent.*  
L. E. SWANSON, A.B., *Assistant Superintendent.*  
DEWITT WRIGHT, B.S., J.D., *Assistant Superintendent.*  
ANNE S. GARRETT, A.B., *Personnel Officer.*  
C. H. COBB, Ph.G., *Business Manager, Medical Division.*  
HENRY BERTRAND, B.B.A., B.S., *Assistant Business Manager, Medical Division.*  
E. S. RAPER, A.B., *Business Manager, Surgical Division.*  
R. N. CRENSHAW, *Assistant Business Manager, Surgical Division.*  
WATSON S. RANKIN, M.D., D.Sc., *Instructor in Hospital Administration.*  
MARSHALL I. PICKENS, A.B., M.A., *Instructor in Hospital Administration.*  
GEORGE P. HARRIS, A.B., *Instructor in Hospital Administration.*  
JAMES R. FELTS, JR., *Instructor in Hospital Administration.*  
CHARLES E. PRALL, A.B., M.A., Ph.D., *Visiting Lecturer in Hospital Administration.*  
SHERWOOD SMITH, A.B., *Assistant in Administration.*  
CHARLES C. CLARK, B.A.E., M.A., *Assistant in Administration.*  
CHARLES H. FRENZEL, A.B., *Assistant in Administration.*  
E. PRIDGEN BARNES, A.B., *Assistant in Administration.*  
JOHN K. LOCKHART, B.S., *Assistant in Administration.*  
E. ALLISON HERRON, A.B., *Assistant in Administration.*  
ROY BRADLEY, A.B., *Assistant in Administration.*  
WILLIE L. SIMON, A.B., *Assistant in Administration.*  
RUSSELL L. DICKS, A.B., B.D., D.D., *Chaplain.*  
FLORENCE K. WILSON, R.N., B.A., M.A., *Dean of School of Nursing.*  
LELIA CLARK, R.N., B.S., M.A., *Director of Nursing Service.*  
ELSIE WILSON MARTIN, A.B., M.S., *Director of Dietetics.*  
ERMA L. ADAMS, *Recorder and Administrative Assistant Dietitian.*  
I. THOMAS REAMER, Ph.G., *Pharmacist.*  
JESSIE LEE SMITH, B.S., *Assistant Pharmacist.*  
REBA NEW HOBGOOD, *Public Dispensary.*  
JUDITH FARRAR, A.B., B.S., *Librarian.*  
MILDRED P. FARRAR, A.B., *Assistant Librarian.*  
CHARLES RONALD STEPHEN, B.Sc., M.D., C.M.D.A., *Chief Anesthetist.*  
RUTH C. MARTIN, A.B., M.D., *Assistant Anesthetist.*  
MARY H. SNIVELY, R.N., M.A.A.N.A., *Instructor in Anesthesiology.*  
ROBERT JAMES REEVES, A.B., M.D., *Chief Radiologist.*  
JANET WIEN, A.B., M.S., *Social Service.*  
JESSIE HARNED BUFKIN, *Record Librarian.*  
ELON HENRY CLARK, *Artist.*  
ROBERT BLAKE, *Assistant Artist.*

HELEN LOUISE KAISER, R.P.T., *Physical Therapist.*

MARTHA MATTHEWS, A.B., *Occupational Therapist.*

BERT R. TITUS, *Braces and Instruments.*

HOSPITAL AND OUT-PATIENT CLINIC TEACHING, RESIDENT AND  
INTERN TEACHING STAFF

See Departmental lists, pages 16-51.

## *Internships and Residencies*

Internships of twelve months' duration with room, board, laundry, and uniforms furnished but without salary, are available in medicine, surgery (including general surgery, urology, orthopaedics, plastic, anesthesia, thoracic, and neuro-surgery), orthopaedics, urology, otolaryngology-ophthalmology, dentistry, obstetrics and gynecology, endocrinology, pediatrics, neuropsychiatry, and pathology commencing July first.

Application blanks for all internships may be obtained by writing to the Superintendent, Duke Hospital, Durham, N. C. Graduates of any Class A medical school are eligible for internships.

After the completion of an internship in Duke Hospital or in another acceptable hospital, a certain number may be appointed as assistant residents in medicine, surgery, obstetrics and gynecology, pediatrics, psychiatry, neurology, dermatology, orthopaedics, urology, otolaryngology, ophthalmology, roentgenology, anesthesiology, pathology, biochemistry, or the Student Health Service or as fellows of the Private Diagnostic Clinic, at a salary of \$250 to \$500 per year with maintenance, and eventually may be promoted to the residency in the various departments or subdepartments of the Hospital at an annual salary of \$500 to \$1,000 with maintenance. Applications should be made to the head of the department concerned.

The Hospital and School of Medicine are an integral part of the Duke University campus, and its educational, recreational, and athletic facilities are available for the Resident Staff.

The present Resident Staff of one hundred nine consists of a resident, twelve assistant residents, and nine interns in medicine; a resident and two assistant residents in dermatology and syphilology; an assistant resident in neurology; five assistant residents in neuropsychiatry; a resident, five assistant residents, and thirteen interns in surgery (the five assistant residents are assigned in rotation to general surgery, plastic, thoracic, neuro-surgery, and pathology); a resident, two assistant residents, and one intern in otolaryngology and ophthalmology; a resident and one assistant resident in orthopaedics; a resident and one assistant resident in urology; a resident and one assistant resident in plastic surgery; a resident, four assistant residents, and three interns in obstetrics and gynecology; a resident and one intern

in endocrinology; a resident, three assistant residents, and eight interns in pediatrics; three interns in obstetrics and pediatrics; two residents and four assistant residents in radiology; a resident, two assistant residents, and three interns in pathology; four assistant residents in anesthesiology, and eight in hospital administration.

### *Postgraduate Study*

Graduates in medicine are welcomed at the various clinics and demonstrations in medicine, surgery, obstetrics, and other specialties, which are held from 9:30 A.M. to 12:30 P.M. each Saturday, as well at the daily ward-rounds in the mornings, and the out-patient clinics in the afternoons. They can start at any time and remain as long as they wish. Additional special work in any department for a period of not less than three months may be arranged by consultation with the head of the department concerned. A certain number of residencies also are available at Duke Hospital in medicine, surgery, obstetrics and gynecology, pediatrics, psychiatry, neurology, dermatology, orthopaedics, urology, otolaryngology, ophthalmology, roentgenology, pathology, and biochemistry. Further information can be obtained by writing to the Dean.

Returning veterans are requested to register on arrival at the Dean's office, Room M133, and with Miss Barbara L. Perkins, 302 Administration, who will assist them in obtaining the benefits of the G. I. Bill of Rights, which will provide tuition and \$75 per month for maintenance (\$105 if one dependent, \$120 if more than one dependent).

## School of Hospital Administration



Eight internships in hospital administration leading to a certificate will be available to university graduates whose character, tact, and ability for leadership are good, and whose academic standing is high. These internships are of two years' duration and pay a small salary in addition to room, board, and laundry. Vacations of two weeks are allowed during each year of internship.

The instruction is practical rather than theoretical in emphasis. The interns are rotated through six different assistant administrative positions in the Hospital. There is also a weekly seminar lasting two hours.

During these two or three years, the interns may also register in the Graduate School of Duke University, and receive the A.M. degree

after the successful completion of a thesis and twenty-four semester hours of university courses in various fields. This additional work will add one year to the program. Further information may be obtained by writing to the Superintendent, Duke Hospital, Durham, N. C.

## School of Nursing



FLORENCE K. WILSON, R.N., B.A., M.A., *Dean of the School of Nursing and Professor of Nursing Education.*

R.N., City Hospital Sch. of Nursing; B.A., Univ. of Mich., 1913; M.A., Western Reserve, 1930; Instr. and Supervisor, Western Res. Univ. Sch. of Nursing, 1923-1929; Research Ass't., Committee on Grading of Schs. of Nursing, 1929-1930; Dir. of the Sch. of Nursing, Syracuse Mem. Hosp.; Instr. and Supervisor Med. Nursing, New York Hosp., 1934-1937; Associate Prof. of Nursing Education, Syracuse Univ., 1943-1945; *Superintendent of Nurses, Duke Hospital, 1946—*

HELEN NAHM, R.N., B.S., M.S., Ph.D., *Director, Division of Nursing Education and Professor of Nursing Education.*

R.N., Univ. of Missouri Sch. of Nursing, 1924; A.B., University of Missouri, 1926; M.S., Univ. of Minnesota, 1939; Ph.D., Univ. of Minnesota, 1946; Instr., Scott and White Hospital, 1927-1930; Dir., Univ. of Missouri Sch. of Nursing, 1935-1941; Dir., Hamline-Asbury Sch. of Nursing, St. Paul, Missouri, 1942-1945; 1946—

The next class of students will be admitted to the Duke University School of Nursing on September 14, 1951, but applications will be considered at any time. Information about the entrance and other requirements, length of course, tuition, fees, application forms and bulletins may be obtained by writing to the Dean of the School of Nursing, Box 3714, Duke Hospital, Durham, N. C.

## School of Dietetics



ELSIE W. MARTIN, A.B., M.S., *Professor of Dietetics.*

A.B., Whitman, 1913; M.S., Teachers Coll., Columbia, 1927; Prof. of Home Economics, Puget Sound, 1915-1917; Dietitian, Univ. of Iowa Hosp., 1919-1920, and Charles T. Miller Hosp., St. Paul, Minn., 1920-1926; Admin. Dietitian, Lakeside Hosp., Cleveland, 1927-1930; *Director of Dietetics, Duke Hospital, 1930—*

ELIZABETH YEARRICK, B.S., M.S., *Teaching and Clinic Dietitian, Assistant Director.*

ERMA LEE ADAMS, A.B., C.P.A., *Accountant and Assistant Director.*

LOU ALFORD, B.S., *Therapeutic Dietitian.*

MAY DEARING NICHOLSON, B.S., *Therapeutic Dietitian.*

BETTY B. WILLS, B.S., *Administrative Ward Dietitian.*

BARBARA C. CRANE, B.S., *Administrative Dietitian.*

DOLLY R. LILES, B.S., *Assistant Therapeutic and Teaching Dietitian.*

In addition to the dietetic training of the students of the Schools of Medicine and Nursing, fourteen dietetic interns may be admitted to the School of Dietetics and given the certificate of graduate dietitian



after the successful completion of one year's internship. The entrance requirements are a Bachelor's degree from an approved university or college, with majors in nutrition and institutional management, and the courses in chemistry, biology, social science, and education recommended by the American Dietetic Association. The course for dietetic interns provides instruction in all phases of hospital and institutional dietetics, including experience from the buying and storage of food to its service to the patients according to the physician's orders. Interns may apply some of their time in securing graduate credit.

The course starts the first of September. All students pay a registration fee of \$10 at the time of appointment. Additional fees are charged if the intern takes additional work in the University for an advanced credit. Maintenance is provided. More detailed information and application blanks may be obtained from the Professor of Dietetics, Duke University School of Dietetics, Durham, N. C.

# Medical Social Service



JANET WIEN, A.B., M.S., *Associate in Medical Social Service.*

A.B., Radcliffe, 1935; M.S., Simmons, 1944; Medical Social Worker, Grace-New Haven Community Hosp., 1944-1949; *Chief of Medical Social Service, Duke Hospital, 1949—*

SARA HARRIETTE AMEY, A.B., *Assistant in Medical Social Service.*

MADGE MARIE AYCOCK, A.B., M.S., *Assistant in Medical Social Service.*

CATHARINE CARTER CATLETT, A.B., M.S., *Assistant in Medical Social Service.*

MARJORIE LEE GARDENIER, A.B., *Assistant in Medical Social Service.*

JANE LOVELACE TIMMONS, A.B., M.S.W., *Assistant in Medical Social Service.*

ROSALYN BRUNSON LIGHTSEY, A.B., M.S.W., *Assistant in Medical Social Service.*

EVALYN LYNCH, A.B., M.S.W., *Assistant in Medical Social Service.*

MARION ISABEL PELTON, A.B., M.S., *Assistant in Medical Social Service.*

Medical social case-work service is offered to patients referred by personnel within the Hospital, and by interested individuals and health and welfare agencies outside of the Hospital. Assistance and advice in connection with the problems presented are available to the members of the Staff and referring agencies.

The division also assists in teaching social and environmental aspects of illness and medical care through consultations and lectures to the students of the Schools of Medicine and Nursing. In addition, it serves as an agency for supervised field work for students of the Graduate School of Social Work of the University of North Carolina. Further information concerning training for advanced students may be obtained from the Social Service Division, Duke Hospital, Durham, N. C.

# Anesthesiology



CHARLES RONALD STEPHEN, B.S., M.D.C.M., *Associate Professor of Anesthesiology and Chief of Division of Anesthesiology.*

B.S. and M.D.C.M., McGill University, 1938 and 1940; Int., Rotat., Montreal General Hosp., 1940-1941; Res. in Med., Jeffrey Hale's Hosp., Quebec City, Que., 1941-1942; Major, Royal Canadian Army Medical Corps, 1942-1946; Ass't. Res., Res. in Dept. of Anes., McGill Univ. School of Anes., December 1942-March 1943; Course in Anes., Royal Infirmary, Oxford; Anesthetist to Montreal Neurological Institute, June 1946-July 1947; Director, Dept. of Anes., Children's Memorial Hosp., Montreal, August 1947-June 30, 1950; Lecturer, Dept. of Anes., McGill Univ., August 1947-August 1949; Ass't. Prof., Dept. of Anes., McGill Univ., August 1949-June 30, 1950; *Associate Professor of Anesthesiology, Duke Hospital, July 1, 1950—*

RUTH CAMPBELL MARTIN, B.A., M.D., *Assistant Professor of Anesthesiology.*

B.A., Texas Christian, 1937; M.D., Washington Med. School, St. Louis, Mo., 1941; Int., Rotat., Deaconess Hosp., St. Louis, Mo., 1941-1942; Ass't. Res., Res. and Instr. in the Dept. of Anes., Billings Hosp., 1942-1944; *Anesthetist, Duke Hospital, 1944—*

MARY H. SNIVELY, R.N., M.A.A.N.A., *Instructor in Anesthesiology, in Charge of Anesthesiology for Nurses.*

R.N., Johns Hopkins Hospital School of Nursing, 1929; Certificate in Anesthesia, Johns Hopkins Hospital, 1930; *Nurse Anesthetist, Duke Hospital, 1930—*

A. FRANCES ROWLAND, R.N., M.A.A.N.A., *Assistant in Anesthesiology.*

MARY B. CAMPBELL, R.N., M.A.A.N.A., *Assistant in Anesthesiology.*

MARTHA BROWN, R.N., M.A.A.N.A., *Assistant in Anesthesiology.*

MILDRED D. ROSEMOND, R.N., M.A.A.N.A., *Assistant in Anesthesiology.*

LOLA A. GLENN, R.N., M.A.A.N.A., *Assistant in Anesthesiology.*

ZETA H. BEESON, R.N., M.A.A.N.A., *Assistant in Anesthesiology.*

EMILY S. KIRKLAND, R.N., M.A.A.N.A., *Assistant in Anesthesiology.*

MARY J. GRINE, R.N., M.A.A.N.A., *Assistant in Anesthesiology.*

## GRADUATE STUDENTS (HOUSE STAFF)

### RESIDENTS AND ASSISTANT RESIDENTS IN ANESTHESIOLOGY

MANUEL VALENCIA ROMERO, M.D., Univ. of Yucatan, 1946.

NESTOR FLOR DE VENECIA, M.D., Coll. of Med., Univ. of the Philippines, 1950.

FRANCIS G. HORNE, M.D., Duke, 1951.

HELEN ELIZABETH HALL, M.D., Med. Coll. of Virginia, 1950.

A two- to three-year residency training program in Anesthesiology is available for physicians who are graduates of a Class A medical school and who have completed an internship in an accredited hospital. This is an approved residency which after two years qualifies the resident to write the American Board examinations. Applicants are accepted January 1st and July 1st. Opportunities are provided to employ all the varied techniques and agents utilized in anesthesia. Emphasis is placed on knowledge of the various diagnostic and therapeutic nerve blocks, and opportunity is provided to learn the standard regional nerve block procedures. Facilities are available for clinical

and experimental research. Seminars are held twice a week for theoretical instruction and review of interesting cases and journals.

Courses available to graduate nurses include an eighteen months' course for nurses who have had no experience in anesthesia, and a nine to twelve months' course for nurses with five years of practical experience who have not had formal training in the specialty. Instruction embraces the theoretical aspects and clinical application of all drugs and techniques in accepted usage. The program is divided into quarters. The major part of the basic theoretical instruction is given during the first three quarters. After a pre-clinical period of eight weeks, clinical practice runs parallel with the theoretical program. One class is accepted annually and enrolled on January 15. All appointments for the current year are made by September 1 of the preceding year. Graduates of these courses are eligible to take the examination given by the American Association of Nurse Anesthetists. Tuition is \$150.00 and \$100.00 respectively. Additional information concerning these programs for nurses may be obtained from Mary H. Snively, R.N., Box 3094, Duke Hospital, Durham, North Carolina.

# Course in Laboratory Technique



HAYWOOD MAURICE TAYLOR, B.S., M.S., Ph.D., *Professor of Toxicology and Associate Professor of Biochemistry.*

DAVID TILLERSON SMITH, A.B., M.D., *Professor of Bacteriology and Associate Professor of Medicine.*

OSCAR CARL EDVARD HANSEN-PRÜSS, A.B., M.D., *Professor of Medicine in Charge of Clinical Microscopy.*

RALPH WAYNE RUNDLES, A.B., Ph.D., M.D., *Assistant Professor of Medicine.*

IVAN W. BROWN, JR., A.B., B.S., M.D., *Associate in Surgery.*

MARY ALVERTA POSTON, A.M., *Instructor in Bacteriology.*

HOYLE W. CRAIG, *Technical Instructor in Bacteriology.*

PRESTON W. SMITH, *Technical Instructor in Hematology.*

The course in laboratory technique, which includes training in blood chemistry, clinical microscopy, bacteriology, serology, basal metabolism, etc., is approved by the Registry of Technicians of the American Society of Clinical Pathology. The course lasts twenty-one months, the next class starting September 17, 1951. The registration fee is \$250, and there are no additional charges except for breakage and student health. The students live in town at their own expense. A minimum of two years of approved college work is required. The degree of B.S. in Medical Technology is awarded upon successful completion of the course. Information as to the specific requirements may be obtained from Dr. Haywood M. Taylor, Duke Hospital, Durham, N. C.



# Course in X-Ray Technology



ROBERT JAMES REEVES, A.B., M.D., *Professor of Radiology and Chairman of the Department.*

GEORGE JAY BAYLIN, A.B., M.D., *Professor of Radiology and Associate in Anatomy.*

JOHN C. GLENN, A.B., M.D., *Assistant Professor of Radiology.*

JOHN B. CAHOON, JR., R.T., A.S.X.T., *Technical Instructor.*

HERMAN L. HASSELL, R.T., *Technical Instructor.*

BETTY MASTERSON, R.T., *Technical Instructor.*

Applicants for training in x-ray technology should satisfy one of the following requirements: A.B. or B.S. degree, or Diploma of Graduate Nurse, or special students without either of these requirements who might be appointed by the committee. The course is of twenty-four months' duration and the following subjects are presented: elementary anatomy and physiology, physics, x-ray equipment, dark room chemistry and procedure, x-ray technics and general office routine. Examination is given at the end of the first quarter and a grade of 75 must be made to continue the course. Two students are appointed in October and two in March each year. The tuition fee is \$25. No maintenance is provided. This course is approved by the American Council of Medical Education, American Medical Association, the American College of Radiology and the American Registry of Radiological Technicians.

# Physical Therapy



LENOX D. BAKER, M.D., *Chairman of Committee on Physical Therapy.*

HELEN LOUISE KAISER, R.P.T., *Associate in Physical Therapy, in Charge of Division of Physical Therapy.*

MARY C. SINGLETON, B.S., R.P.T., *Instructor in Physical Therapy.*

MARY L. DONOVAN, B.S., R.P.T., *Assistant in Physical Therapy.*

ENOLA S. FLOWERS, B.S., R.P.T., *Assistant in Physical Therapy.*

\*JOAN LEWIS, M.C.S.P., *Assistant in Physical Therapy.*

GILLIAN G. SMITH, B.S., R.P.T., *Assistant in Physical Therapy.*

EDNA M. POPLIN, B.A., R.P.T., *Assistant in Physical Therapy.*

RUTH CADBURY RICHARDSON, A.B., M.A., R.P.T., *Assistant in Physical Therapy.*

EDNA BLUMENTHAL, B.S., *Lecturer in Physical Therapy.*

A fifteen months' course in physical therapy is offered for men and women graduates of accredited schools of physical education and nursing, and for selected applicants who have completed ninety college semester hours, including credit in the biological sciences, physics, chemistry and psychology. The curriculum provides instruction in anatomy, physiology, kinesiology, pathology, psychology, electrotherapy, neuropsychiatry, therapeutic exercise and the principles of rehabilitation. Instruction in the clinical subjects is given by members of the faculty of the School of Medicine. Clinical training will be given at Duke Hospital and affiliated institutions and includes supervision of orthopaedic problems in the Durham Public Schools. The course starts in October. The tuition fee is \$350 plus \$35 for medical fee, and does not include maintenance. A certificate is awarded upon successful completion of the course. Eighteen hours of credit may be earned toward the baccalaureate degree.

In addition to the above, a six months' course in the Psychosomatic Aspects of Physical Therapy is given to registered graduate physical therapists. The course includes a study of personality structure, adjustment, tensions, anxiety and their relation to patient behavior and management. The tuition fee is \$150.00. A certificate is awarded. Courses are given to the students of the Schools of Medicine and Nursing. Further information and application blanks may be obtained from the Division of Physical Therapy, Duke Hospital, Durham, N. C.

\* Member of Chartered Society of Physiotherapy, England.

# Medical Record Library



J. LAMAR CALLAWAY, B.S., M.D., *Chairman of Committee on Records.*

J. HARNED BUFKIN, R.N., R.R.L., *Chief Medical Record Librarian.*

BETTY S. WIGGINS, A.B., R.R.L., *Assistant Medical Record Librarian.*

MARJORIE B. FULLER, A.B., B.S., R.R.L., *Assistant Medical Record Librarian.*

BESS M. CEBE, A.B., R.R.L., *Assistant Medical Record Librarian.*

A twelve months' course for the training of medical record librarians which has been given full approval by the American Association of Medical Record Librarians and the American Medical Association, includes three months of classes and nine months of internship with rotation through inter- and extra-departmental stations. Applicants are judged individually for eligibility, and education, training, and experience are all taken into consideration. The curriculum provides instruction in the theory of medical record library science, and an introduction to anatomy, physiology, pathology, medical and operative terminology, and medical diction. Instruction is given by members of the faculty of the School of Medicine, with special lectures on hospital management and correlation of various hospital departments, as well as seminars on legal aspects and administrative uses of medical case records. Internship includes application of class work in actual practice and covers all phases of medical record library work. The course starts in October. The tuition fee is \$175.00 and does not include maintenance. A certificate is awarded upon successful completion of the course. Applications may be made to the Medical Record Librarian, Box 3307, Duke Hospital, Durham, N. C.

# Division of Medical Art and Illustration



ELON H. CLARK, *Associate Professor of Medical Art and Illustration.*

Rochester Institute of Technology, 1927-1930; Johns Hopkins School of Medical Art, 1930-1933; Instr., Medical Art, Johns Hopkins School of Medical Art, 1933-1934; Chrm., Medical Art and Illustration Div., Duke, 1934—

HENRY F. PICKETT, *Instructor in Medical Art and Illustration.*

ROBERT L. BLAKE, *Instructor in Medical Art and Illustration.*

GEORGE C. LYNCH, *Medical Artist.*

RUTH SCHWARTZ, *Letter Artist.*

RAYMOND L. HOWARD, *Medical Photographer.*

A. C. WEBSTER, *Medical Photographer.*

ILSA EBERT, *Assistant Medical Photographer.*

The primary function of this Division is to produce visual clinical records for supplementation of case histories, visual aids for teaching, illustrations for publication, and accurate drawings of conditions in which draftsmanship, knowledge of subject and imagination are the prime requisites. Requests for this work may emanate from any of the medical or allied sciences. Other services offered are: the production of exhibits, casts, models, prosthetic appliances, tantalum plates, charts, graphs, mechanical drawings, clinical photographs (still), motion pictures, photomicrography, fundus photography, copying, lantern slides, prints in black and white and color and special problems in infra-red.

# School of Medicine Students



(At beginning of autumn quarter, October 2, 1950)

	First-Year	Second-Year	Junior Year	Senior Year	Total	1932-1951 Graduates
Students	80	75	78	76	309	1,180

## FIRST-YEAR STUDENTS

Adamson, Jerry Eugene (West Virginia University), New Martinsville, W. Va.  
 Arthur, Robert Miller (George Washington University, University of North Carolina), Hillsboro, N. C.  
 Aycock, William Glenn (Duke University), Fremont, N. C.  
 Ayers, John Clifford, Jr. (Duke University), Nichols, S. C.  
 Barr, Frank Woodworth, Jr. (Davidson College), Charlotte, N. C.  
 Barrett, John Albert, Jr. (Duke University), Mt. Holly, N. C.  
 Bethune, William Murphy, Jr. (Wake Forest College), Clinton, N. C.  
 Bouzard, Walter Carroll (Lenoir-Rhyne College), Durham, N. C.  
 Brandy, Joseph Ralph, Jr. (University of Rochester), Ogdensburg, N. Y.  
 Brewer, John Mickle, Jr. (University of North Carolina), Kershaw, S. C.  
 Brock, Charles Lee (Duke University, Asheville-Biltmore College), Asheville, N. C.  
 Buckley, Charles Edward, III (Virginia Polytechnic Institute), Charleston, W. Va.  
 Carr, Henry James, Jr. (Elon College, Wake Forest College), Roseboro, N. C.  
 Clement, James Edwin (University of North Carolina), Raleigh, N. C.  
 Cohen, Harvey Jay (University of North Carolina), Columbia, S. C.  
 Constantine, Thomas Moore (Duke University), Racine, Wis.  
 Craddock, John Goodwin, Jr. (Belmont Abbey Junior College, Duke University), Charlotte, N. C.  
 Crevasse, Lamar Earle, Jr. (Duke University), Tampa, Fla.  
 Davis, Arnold Van Osdal (Duke University, University of Louisville), New Albany, Ind.  
 DeLaughter, George Dewey, Jr. (George Washington University, Duke University), Durham, N. C.  
 DePass, Skottowe Wannamaker (The Citadel, Duke University), Camden, S. C.  
 Elliott, James Francis (Lenoir-Rhyne College), Charlotte, N. C.  
 Finch, Charlie Bryan (Mars Hill College, Wake Forest College), Oxford, N. C.  
 Floyd, Marian Anita (Florida State University, Duke University), Winter Park, Fla.  
 Forrester, Eugene Norwood (University of Florida, University of North Carolina, Duke University), Dinsmore, Fla.  
 Friede, Louise Elaine (Roanoke College), Accident, Md.  
 Gore, John Pratt (University of Richmond, Clemson College, Wake Forest College), Asheville, N. C.  
 Gould, Kenneth George, Jr. (Duke University), Tampa, Fla.  
 Hair, Thomas Eugene, Jr. (University of South Carolina), Columbia, S. C.  
 Hedge, Raymond Harvey, Jr. (Citadel, Rice Institute), Tyler, Tex.  
 Helms, William Kendall, Jr. (Duke University), Columbia, S. C.  
 Hewitt, Wilmer Clyde, Jr. (College of Pudget Sound, University of Washington), Tacoma, Wash.  
 Hill, Paul Edward (Western Carolina Teachers College, University of North Carolina), Murphy, N. C.  
 Holden, Alan Berle (Keystone Junior College, Columbia University, University of Michigan), Belle Harbor, N. Y.  
 Holland, Hal Curtis (Idaho State College, College of Idaho, University of Utah, Brigham Young University, Stanford University Graduate School), Idaho Falls, Idaho.  
 Horsley, Howard Theodore (Wake Forest College), Franklin, N. C.  
 Huber, Donald Simon (Duke University), High Point, N. C.  
 Hudmon, I. Stanton, Jr. (Duke University), Jacksonville, Fla.  
 Ira, Gordon Henry, Jr. (Duke University), Jacksonville, Fla.  
 Jackson, Benjamin Taylor (Duke University), Jacksonville, Fla.  
 James, Charles Alston (Citadel), Columbia, S. C.  
 Jones, James David (Virginia Military Institute), Dallas, Tex.  
 Jones, William Burrell (Citadel), Ocala, Fla.  
 Kelley, James Marvin, Jr. (Southern Methodist University, Rice Institute), Dallas, Tex.  
 Kelly, Richard Alexander, Jr. (Wake Forest College), Matthews, N. C.  
 Kenaston, Thomas Corwin, Jr. (Duke University), Cocoa, Fla.  
 Losin, Sheldon (University of Maryland, New York University), Baltimore, Md.  
 Ludlow, Enoch Andrus (Brigham Young University), Spanish Fork, Utah.  
 Magee, George Franklin (University of Nevada, University of California), Reno, Nev.  
 Mattox, Huit Everett, Jr. (Duke University, Concord College), Bluefield, W. Va.  
 McGerity, Joseph Lochr (Georgetown University, Columbia University, Duke University), West Palm Beach, Fla.



McGowan, Jack Landis (Tulane University, Emory University, University of North Carolina), Hamlet, N. C.  
 Mebane, Giles Yancey (Duke University), Raleigh, N. C.  
 Melton, Robert Allen (Duke University), Wilmington, N. C.  
 Morgan, Thomas Edward, Jr. (Duke University), Jacksonville, Fla.  
 Muekamp, George Howard (University of Cincinnati), Cincinnati, Ohio.  
 Newman, Ernest Gustave (Duke University), Pensacola, Fla.  
 O'Neill, James Flemister (Princeton University, Duke University), Savannah, Ga.  
 Past, Si Alexander, Jr. (University of Chattanooga, Duke University), Chattanooga, Tenn.  
 Patton, Robert Gray (Yale University, Duke University), Durham, N. C.  
 Pierson, George Herman, Jr. (Washington and Lee University), Charleston, W. Va.  
 Pinsker, Henry (William and Mary, New York University), Paterson, N. J.  
 Potter, Clyde Randolph, Jr. (Wake Forest College), Belhaven, N. C.  
 Ramey, James William (University of Kentucky), Mt. Sterling, Ky.  
 Rippy, Girard Crawford, Jr. (Furman University, Duke University), Greenville, S. C.  
 Shapiro, Oscar William (Duke University), Newark, N. J.  
 Shugerman, Earle Hilel (Birmingham-Southern College, University of Alabama), Birmingham, Ala.  
 Sing, Robert Lloyd, Jr. (University of North Carolina, Queens College), Charlotte, N. C.  
 Skipworth, George Brook (University of Georgia, Duke University), Columbus, Ga.  
 Spach, Madison Stockton (Duke University), Winston-Salem, N. C.  
 Stallings, Tolbert Lacy, Jr. (University of Mississippi, North George College, N. C. State College, University of Fribourg (Switzerland), Duke University), Louisville, N. C.  
 Talley, William Clinton (Guilford College, University of North Carolina), Greensboro, N. C.  
 Tannehill, Antone Walter, Jr. (Vanderbilt University), Hattiesburg, Miss.  
 Thomas, Annabelle (University of North Carolina), Burlington, N. C.  
 Tickle, Dewey Reid (Duke University), Burlington, N. C.  
 Verner, John Victor, Jr. (University of Mississippi, North Georgia College, North Carolina State College, Duke University), Danville, Va.  
 Vetter, John Stanley (Wake Forest College), Mt. Olive, N. C.  
 Wanzer, Sidney Hovey (Duke University), Charlotte, N. C.  
 Williams, Kenneth Trotter (Duke University), Charlotte, N. C.  
 Yudell, Robert Ben (Duke University), New Bern, N. C.

## SECOND-YEAR STUDENTS

Adams, Reuben Homer, Jr. (University of Cincinnati, Southern Methodist University), Union, N. J.  
 Appen, Raymond Carl (Duke University), Somerset, Ky.  
 Ayerst, Robert Irvin (Yale University, Duke University), Connellsville, Pa.  
 Baeos, James Michael (Virginia Polytechnic Institute), Brooklyn, N. Y.  
 Baer, Bruce Lawrence (Duke University, Haverford College), Chapel Hill, N. C.  
 Bell, William Reed (University of Florida, University of the South), Pensacola, Fla.  
 Berlin, Melvin (Duke University), Savannah, Ga.  
 Berry, Joseph Norman (Clemson College), Charleston, S. C.  
 Blackard, Embree Hoss, Jr. (Duke University), Gastonia, N. C.  
 Bondurant, Stuart Osborne, Jr. (University of North Carolina), Winston-Salem, N. C.  
 Boren, Richard Benjamin, III (University of North Carolina), Greensboro, N. C.  
 Brice, George Wilson, Jr. (Duke University), Charlotte, N. C.  
 Bridges, Ronzee McIntyre (Louisiana State University, Duke University), Shreveport, La.  
 Brockmann, John Lyndon (University of North Carolina), High Point, N. C.  
 Bryant, Gerald Nelson, Jr. (High Point College, University of North Carolina), Statesville, N. C.  
 Bullard, Lubin Fletcher, Jr. (University of North Carolina), Garland, N. C.  
 Butler, William Gilbert, Jr. (University of North Carolina), Laurinburg, N. C.  
 Caffey, John William, Jr. (Duke University), Greensboro, N. C.  
 Cain, Frank Coral, Jr. (Catawba College), Salisbury, N. C.  
 Carter, Needham Battle (Duke University), Rocky Mount, N. C.  
 Casto, Dorothy Louise (West Virginia University), Morgantown, W. Va.  
 Chick, Ernest Watson (Duke University), Durham, N. C.  
 Chittum, John Raymond (Wooster, Duke University), Wooster, Ohio.  
 Cobey, William Gray (University of Minnesota, University of the South), Louisburg, N. C.  
 Earley, Charles Marion, Jr. (Duke University), Norfolk, Va.  
 Edwards, Ian Keith (Duke University), Easley, S. C.  
 Evans, Eugene Micheaux, Jr. (Duke University), Durham, N. C.  
 Evans, William Canfield, Jr. (Duke University), Gainesville, Fla.  
 Fishel, John Lewis (University of North Carolina), Winston-Salem, N. C.  
 Flanagan, John Francis (Virginia Polytechnic Institute), Blacksburg, Va.  
 Fogleman, Ross Lee, Jr. (Cornell University, Guilford College, Duke University), Greensboro, N. C.  
 Fowler, William Robert (University of North Carolina), Pilot Mountain, N. C.  
 Garlington, Laurens Nelson (Duke University), Birmingham, Ala.  
 Gibbs, Robert Walter (University of South Carolina), Columbia, S. C.  
 Gleason, William Lounsbury (Duke University), Daytona Beach, Fla.  
 Glenn, James Francis (University of Kentucky, University of Rochester), Lexington, Ky.  
 Hall, Kenneth Daland (Duke University), Durham, N. C.  
 Haworth, Sara Eldora (Guilford College), High Point, N. C.  
 Hicks, Julius Norton (Duke University), Enterprise, Ala.  
 Hillman, Charles Harlan (Virginia Polytechnic Institute), Blacksburg, Va.  
 Keck, Charles, Jr. (Cornell University, Duke University), New York, N. Y.

Kent, Alfred Henry (Duke University), Winter Park, Fla.  
 Kernodle, Donald Reid (Elon College), Elon College, N. C.  
 Lyday, William Davie (Davidson College), Gastonia, N. C.  
 Mabe, Paul Alexander, Jr. (Wake Forest College), Morganton, N. C.  
 Mabry, Edward Bloxton (Duke University), Greensboro, N. C.  
 McArn, Hugh Munroe, Jr. (Davidson College), Laurinburg, N. C.  
 McCall, John B., Jr. (University of Virginia, Duke University), Jacksonville, Fla.  
 McNeely, Irwin Hollar (Duke University), Morganton, N. C.  
 Meiselman, Rude Karmus (Brown University), Charlotte, N. C.  
 Metcalf, Boyd Hendren (Duke University), Chevy Chase, Md.  
 Niblock, Franklin Chalmers, Jr. (Oregon State College, Davidson College), Concord, N. C.  
 Overton, Dolphin Henry, Jr. (Virginia Military Institute), Shelby, N. C.  
 Parker, Mayon Vann (Duke University), Durham, N. C.  
 Parkerson, George Robert, Jr. (Duke University), Macon, Ga.  
 Pierce, Ellison Cline, Jr. (University of Virginia), Gastonia, N. C.  
 Pollard, Lawrence Welford, Jr. (University of South Carolina), Columbia, S. C.  
 Rankin, Richard Brandon, Jr. (Wake Forest College), Concord, N. C.  
 Roof, Anne Carolyn (University of South Carolina), Columbia, S. C.  
 Rosenmond, Robert Malone (Duke University), Charleston, S. C.  
 Sager, Samuel Ott (Duke University), Danville, Va.  
 Somers, James Earl (North Carolina State College, University of North Carolina), Burlington, N. C.  
 Stickel, Delford LeFew (Duke University), Martinsville, W. Va.  
 Tatom, Louis (Duke University), Ft. Monmouth, N. J.  
 Terrell, Thomas Eugene (Guilford College), Greensboro, N. C.  
 Urban, Adolph Joseph (University of North Carolina), Newark, N. J.  
 Vestal, Tom Alford (University of North Carolina), Rocky Mount, N. C.  
 Watt, Thomas Bunyan, Jr. (U. S. Naval Academy, Duke University), Hartsville, S. C.  
 Welch, George Harrison, Jr. (Duke University), Anderson, S. C.  
 Williams, Jean Babington, Jr. (Duke University), Hendersonville, N. C.  
 Williams, Jesse Lee, Jr. (Harvard University, University of Florida), Jacksonville, Fla.  
 Winslow, Francis Edward, Jr. (Harvard University, University of North Carolina), Rocky Mount, N. C.  
 Woodbury, Philip Stephen (Duke University), Pearisburg, Va.  
 Worsham, Julius Berry, Jr. (Duke University), Ruffin, N. C.  
 Young, Charles Gibson (Wake Forest College), Winston-Salem, N. C.

## JUNIOR STUDENTS

Agner, Marshal Edward (Lenoir-Rhyne College), Spencer, N. C.  
 Alexander, Lawrence Melton (Duke University), Lexington, N. C.  
 Altany, Franklin Edward (University of Mississippi, St. Vincent College), Brackenridge, Pa.  
 Alter, George Frederick (Ohio State University, University of Toledo), Toledo, Ohio.  
 Anderson, William Henry, Jr. (Presbyterian College), West Point, Ga.  
 Ardrey, William Benjamin, III (The Citadel), Fort Mill, S. C.  
 Baldwin, Kenneth Rone (Duke University), Whiteville, N. C.  
 Bethany, Joe Jackson, Jr. (University of Alabama), Boligee, Ala.  
 Bowen, James Lamar (Duke University), Westminster, S. C.  
 Bowles, Richard Morgan (Duke University), Long Island, N. Y.  
 Brass, Phillipp (New York University, Seton Hall College), Newark, N. J.  
 Brewer, Spencer Spainhour, Jr. (The Citadel, University of Georgia), Atlanta, Ga.  
 Burks, Henry Lucius (University of Texas), Tyler, Texas.  
 Chambers, Robert Edward (University of Oklahoma), Oklahoma City, Okla.  
 Cheers, William Crockett, Jr. (Duke University), Charlotte, N. C.  
 Coggeshall, Berryman Edwards, Jr. (Duke University), Darlington, S. C.  
 Cooper, Frank Benton (Davidson College, University of North Carolina), Statesville, N. C.  
 Corpening, Joseph Durham (University of North Carolina), Granite Falls, N. C.  
 Cox, Howard Louis (Wake Forest College, Duke University), Jonesboro, N. C.  
 \*Crowder, John Nathaniel (Duke University), High Point, N. C.  
 Davenport, Clifton (Duke University), Durham, N. C.  
 David, Noble Jonathan (Duke University), Jacksonville, Fla.  
 Davidson, Norman William (Franklin & Marshall College), Baltimore, Md.  
 Davidson, William David (Univ. of Arizona, Duke University), Los Angeles, Calif.  
 Dees, John Tyler (University of North Carolina), Burgaw, N. C.  
 Frazer, Joe Walton, Jr. (Clemson College), Charlotte, N. C.  
 Futrell, Mary Frances (Peabody College, Univ. of Kentucky), Cadiz, Ky.  
 Garrett, Spencer Roberts (Alabama Polytechnic Institute, Univ. of Miami), Columbus, Ga.  
 Gomez, Alphonse Charles (Dakota Wesleyan Univ., St. Louis Univ.), LaPaz, Bolivia, S. A.  
 Graham, Harvey Polhemus (Duke University), Pearl River, N. Y.  
 Hampton, Ambrose Gonzales, Jr. (The Citadel), Raleigh, N. C.  
 Hartley, James Phillip (N. C. State College, Univ. of Florida), Miami, Fla.  
 Jackson, Elizabeth Claire (Duke University), Portland, Conn.  
 Jeter, Robert Vernon (N. C. State College, Duke University), Raleigh, N. C.  
 Jones, William Bailey (Mass. Institute of Tech., Duke University), Mobile, Ala.  
 Kaicher, Thomas Victor (Holy Cross College), Brooklyn, N. Y.  
 Kawchak, James (Duke University), Johnstown, Pa.  
 Kimmelstiel, Ruth (Randolph-Macon College), Charlotte, N. C.  
 Kinder, Jack (Duke University), Passaic, N. J.

\* On leave of absence.

- Langley, Thomas Ellison (East Carolina Teachers College, Wake Forest College), Greenville, N. C.
- Link, Robert Jeffrey (Bethany College), Uniontown, Pa.
- Lourie, Herbert (Univ. of South Carolina), St. George, S. C.
- Magill, Frank Bell (Univ. of Illinois, Va. Polytechnic Institute), Shanghai, China.
- Marder, Gerard (Biltmore Jr. College, Univ. of North Carolina), Asheville, N. C.
- McCall, Michael Alvin (Vanderbilt University, N. C. State College, U. N. C. Extension), Marion, N. C.
- McCarley, Ben Pushmataha (Virginia Military Institute, Southern Methodist University), McAlester, Okla.
- McClung, Eugene (West Va., Wesleyan, Duke University), Beckley, W. Va.
- Meyer, George Wright (Univ. of North Carolina), Chapel Hill, N. C.
- Michaels, Marilyn Jean (Duke University), Gadsden, Ala.
- Miller, Augustus Taylor, Jr. (University of North Carolina), College Park, Ga.
- Moody, William Alton (Clarion State Teachers College, Wake Forest College), Rockingham, N. C.
- Moore, de Saussure Parker, Jr. (Univ. of North Carolina), Kingstree, S. C.
- Morris, Francis Albert, Jr. (Univ. of Texas), Beaumont, Texas.
- Mott, Helen Josephine Elizabeth (Custer County Junior College, Montana State College), Miles City, Mont.
- Paar, James Albert (Duke University), Warren, Ohio.
- Park, Charles Wilbur (Kent State, Mount Union, Ohio State), Columbus, Ohio.
- Peedin, James Harold, Jr. (University of North Carolina), Selma, N. C.
- \*Perry, William John (Sacramento Junior College, University of California, American University), Grass Valley, Calif.
- Pryor, John Ray (Univ. of Louisville, Univ. of Kentucky), Mayfield, Ky.
- Reed, Clark Grant (San Jose State College), San Jose, Calif.
- Reinmuth, Oscar McNaughton (Univ. of Texas), Austin, Texas.
- Savitt, Allen Jack (Duke University), Ansonia, Conn.
- Shapiro, Lewis (Duke University), Great Neck, N. Y.
- Skeen, Max Verne (Princeton University), High Rock, N. C.
- Smith, George Bryan, Jr. (Duke University), Greenville, S. C.
- Smith, Joseph James Lawton (Furman University, Emory University), Greenville, S. C.
- Stennett, Clarence Ernest (Concord College), Princeton, W. Va.
- Stewart, Edgar Bethea (The Citadel), Laurinburg, N. C.
- Tahan, Naim George (Univ. of Iowa, Univ. of Arizona), Tucson, Ariz.
- Travis, Burton Lester (Cornell University, Columbia University, Univ. of North Carolina), New York, N. Y.
- Wallace, John Dixon, Jr. (Duke University, Alabama Polytechnic Institute, Univ. of Kentucky), Charlotte, N. C.
- Wansker, Bernard Arthur (Duke University), Athens, Ga.
- Warren, Donald Eugene (Florida Southern College, Washington and Lee University), Lakeland, Fla.
- Wester, Millard Winston, Jr. (N. C. State College, Davidson College), Henderson, N. C.
- Willis, Henry Kendall (University of North Carolina), McCain, N. C.
- Wolf, Robert Lawrence (Duke University), Brooklyn, N. Y.
- Wright, Henry Livingston, Jr. (Alabama Polytechnic Institute, Ball State Teachers College, Spring Hill College), Mobile, Ala.
- Young, Robert Ulrich (Duke University), Swannanoa, N. C.

## SENIOR STUDENTS

- Agner, Roy Augusta, Jr. (Lenoir-Rhyne College, Washington University, Catawba College), Spencer, N. C.
- Austin, Charles Newton (West Virginia University, Duke University), Charleston, W. Va.
- Austin, James Howard (Randolph-Macon Academy, Duke University), Valencia, Pa.
- Bell, William Sterling (Schreiner Institute, Texas Christian University, Texas University), Austin, Texas.
- Bledsoe, Robert Eugene (University of Mississippi School of Medicine), University, Miss.
- Blue, Willis Berton (David Lipscomb College, Vanderbilt University, Duke University), Robards, Ky.
- Booker, Laurena Park (Woman's College of the University of North Carolina), Greensboro, N. C.
- Brock, Julian Stanley (University of North Carolina), Rocky Mount, N. C.
- Castle, Charles Hilmon (University of Mississippi School of Medicine), Pachuta, Miss.
- Chase, George Oscar (University of Maine, Duke University), Millinocket, Maine.
- Coggins, Deborah Ferne Reed (Florida State College for Women, University of Washington, University of Tampa, University of Florida), Tampa, Fla.
- Coggins, Wilmer Jesse, Jr. (Duke University), Madison, Fla.
- Coleman, Blair Pickens (Rice Institute), Wichita Falls, Texas.
- Conover, Raymond Everett (Baylor University), Neptune, N. J.
- Cook, Paul Huie (Pfeiffer Junior College, Berry College, Duke University), Union Grove, N. C.
- Cranford, James Abram, Jr. (Washington and Lee University), Jacksonville, Fla.
- Curtis, Thomas Edwin (Oklahoma University, Southwestern University, Oklahoma University), Miami, Okla.
- Daniel, Thomas Manning (Louisburg College, Duke University), Oxford, N. C.
- Dimmette, James Edwin (High Point College, University of Texas, Duke University), Laurel Hill, N. C.

\* On leave of absence.



- Drake, David Ewing (Duke University), Knoxville, Tenn.  
 Easterling, John Garlick (Duke University), Rocky Mount, N. C.  
 Ellis, Fred Wilson (University of North Carolina), Heath Springs, S. C.  
 Engel, Marvin Franklin (Duke University), Atlantic City, N. J.  
 Evans, Eugene Goldsmith, Jr. (Clemson College, Newberry College), Pendleton, S. C.  
 Ewy, Henry Herman (North Dakota State College, University of North Dakota Medical School), Fargo, N. D.  
 Fair, William Leonard (University of Missouri, University of Wisconsin, University of Missouri Medical School), Chillicothe, Miss.  
 Fink, Chester Walter (Duke University), Durham, N. C.  
 Gorsuch, Thomas Leonard (Duke University), Baltimore, Md.  
 Green, Paul, Jr. (Duke University), Thomasville, N. C.  
 Haltiwanger, Earl, Jr. (The Citadel, Emory University), Lake City, Fla.  
 Hanes, Kenneth Frederick (Geneva College, Mt. Union College), East Liverpool, Ohio.  
 Hanson, Charles Andrew (University of Michigan, Duke University), Geneva, Ill.  
 Hershberger, Robert LeRoy (Sam Houston State Teachers College, University of Texas), La Porte, Texas.  
 Hiatt, Edwin Peelle (University of North Carolina), Wilmington, Ohio.  
 Hiatt, Rudger Puckett (Brigham Young University, University of New Mexico, University of Arizona), Mesa, Ariz.  
 Holland, Malvern Carlyle (University of South Carolina, North Georgia College, Rutgers University), Simpsonville, S. C.  
 Honig, Edward Irving (University of Buffalo, College of William and Mary), New York City, N. Y.  
 Horne, Francis Gregg (The Citadel, Duke University), Sumter, S. C.  
 Inman, Charles Ernest (Wake Forest College, Duke University), Fairmont, N. C.  
 Jackson, Beverly Joy Neely (Duke University), Atlanta, Ga.  
 Jackson, Murray Threadgill, Jr. (Davidson College, Catawba College, Duke University), Kannapolis, N. C.  
 Jaeger, Carl Alphon (Cornell University, St. Vincent College), Greenwich, Conn.  
 Johnston, David Hale (North Carolina State College, Duke University), Roper, N. C.  
 Kandel, Robert Franklin (Duke University), Louisville, Ohio.  
 Lockhart, David Armistead (Tulane University, University of the South), St. Helena's Island, S. C.  
 Luzadre, John Hinkle (University of Pittsburgh), Sewickley, Pa.  
 Mandanis, John Peter (University of Athens, Wofford College), Spartanburg, S. C.  
 Mangum, Jack Fitch (The Citadel, Duke University), Hamlet, N. C.  
 McFadyen, Susan Routh (Woman's College of the University of North Carolina), Greensboro, N. C.  
 McGee, Harry Hand, Jr. (Ursinus College, Duke University), Savannah, Ga.  
 Melero, Andrés Tarcisio (University of Puerto Rico, Duke University), San Juan, P. R.  
 Mertz, Joanne Elizabeth (Purdue University), Logansport, Ind.  
 Parapid, Nicholas Vladimir (Sacramento Junior College, Catawba College), Salisbury, N. C.  
 Pruet, Charles Danny (Emory and Henry College, Duke University), Bluefield, Va.  
 Ragland, John Elliott (Princeton University), Orange, Calif.  
 Remus, Luis Enrique, Jr. (The Citadel), Santurce, P. R.  
 Reynolds, David Hyatt (Ohio State University), Dayton, Ohio.  
 Rice, Alonzo Douglas (Northwestern University, Concord College, West Virginia University, Duke University), Charleston, W. Va.  
 Schmidt, Evelyn D. (Duke University), N. Plainfield, N. J.  
 Schnoor, Ernest Edgar (University of California), Walnut Creek, Calif.  
 Sellers, Alfred Mayer (Temple University), Philadelphia, Pa.  
 Shancroft, Donald Yeoman (Princeton University), Brooklyn, N. Y.  
 Smith, Jesse Graham, Jr. (Duke University), Asheboro, N. C.  
 Stanley, Gordon Douglas (University of Florida), Sanford, Fla.  
 Sullenberger, John William (University of Tennessee, Carson-Newman College, Duke University), Tallahassee, Fla.  
 Underwood, Russell Spaldon (University of Notre Dame), Waynesville, N. C.  
 Walker, William Freeman (Duke University), Hazlehurst, Ga.  
 Walters, Paul Allen, Jr. (University of North Carolina), Durham, N. C.  
 Warren, Joseph Benjamin (Duke University), Lenoir, N. C.  
 Welch, James Edward (Virginia Polytechnic Institute, Duke University), Suffolk, Va.  
 Wester, Thaddeus Bryan (North Carolina College of A. & E., Carson-Newman College, Duke University), Henderson, N. C.  
 White, Ben Terry, II (Western Kentucky Teachers College, University of Kentucky), Cadiz, Ky.  
 Whitesides, Edward Steele (Davidson College, Michigan State Normal), Gastonia, N. C.  
 Williams, Harold Lee (Duke University), Greenville, N. C.  
 Williams, Louis Howard (Duke University), Greenville, N. C.  
 Wingfield, Robert Terrell (Virginia Military Institute, Duke University), Lynchburg, Va.





# Index



Adams, D. K. ....	35	Ayers, J. C., Jr. ....	67
Adams, E. L. ....	54, 57	Ayerst, R. I. ....	68
Adams, J. P. ....	39		
Adams, R. H., Jr. ....	68	Bachelor of Science, Medicine. ....	10
Adamson, J. E. ....	67	Nursing ....	57
Adkins, T. F. ....	45	Bacos, J. M. ....	68
Administration, Duke Hospital. ....	56	Bacteriology ....	21
Staff ....	54	Bade, C. P. ....	39
Committee on ....	53	Baer, B. L. ....	68
Admission, Application for ....	11	Bagby Award ....	16
Committee on ....	52	Baker, H. W., Jr. ....	38
Requirements for ....	11	Baker, L. D. ....	37, 53, 64
Test ....	12	Baldwin, M. ....	34
Agner, M. E. ....	69	Baldwin, K. R. ....	69
Agner, R. A., Jr. ....	30, 70	Barefoot, S. W. ....	26
Aims of the School. ....	5	Barger, B. ....	35
Alford, L. ....	57	Barnes, E. P. ....	34, 54
Alexander, L. M. ....	69	Barr, F. W., Jr. ....	67
Allen, A. L. ....	43	Barrett, J. A., Jr. ....	67
Altany, F. E. ....	69	Bassett, V. H. ....	12
Alter, G. F. ....	69	Batchelor, R. P. ....	13
Altwater, F. V. ....	12	Baylin, G. J. ....	17, 43, 63
Alyea, E. P. ....	38	Beard, D. W. ....	38
Amey, S. H. ....	59	Beard, J. W. ....	22, 37, 52, 53
Anatomy ....	17	Beaumont Committee ....	52
Anderson, W. B. ....	37	Becker, M. C. ....	29
Anderson, W. H., Jr. ....	69	Beeson, Z. H. ....	60
Anesthesiology ....	60	Bell, D. M. ....	29
Angier B. Duke Memorial and		Bell, I. E. ....	43
other Loan Funds ....	15	Bell, W. R. ....	68
Anlyan, W. G. ....	40	Bell, W. S. ....	70
Appen, R. C. ....	68	Belser, R. H. ....	39
Application, for Admission ....	11	Bennett, I. L. ....	29
Anesthesiology ....	60	Bennett, R. L. ....	38
Hospital Administration ....	56	Benton, A. L. ....	12
Internships ....	55	Berblinger, K. W. ....	32
Medical Record Library ....	64	Berlin, M. ....	68
Physical Therapy ....	63	Bernheim, F. W. ....	20, 52
Postgraduate Study ....	56	Bernheim, M. L. C. ....	18
School of Dietetics ....	57	Berrios, A. ....	39
School of Medicine ....	11	Berry, J. N. ....	68
School of Nursing ....	57	Berton, W. M. ....	23
Ardrey, W. B., III. ....	69	Bertrand, H. ....	54
Arena, J. M. ....	46	Bethany, J. J., Jr. ....	69
Arey, J. V. ....	45	Bethune, W. M., Jr. ....	67
Armstrong, F. P. ....	19	Bigger, I. A. ....	13
Armstrong, P. P. ....	13	Biochemistry ....	18
Arnold, R. A. ....	37	Biology, Requirement in ....	11
Arthur, R. M. ....	67	Biostatistics ....	9
Athletic Fee ....	14	Bishop, C. ....	23
Atoynton, T. H. ....	36	Blackard, E. B., Jr. ....	68
Atwood, T. W. ....	38	Blair, W. F. ....	34
Austin, C. N. ....	70	Blake, R. L. ....	54, 65
Austin, J. H. ....	46	Bledsoe, R. E. ....	70
Autumn Quarter, Curriculum ....	9	Bloor, B. M. ....	39
Dates ....	4	Blue, W. B. ....	70
Awards ....	15, 16	Blumenthal, E. ....	64
Aycock, M. M. ....	59	Board, expenses ....	14
Aycock, W. G. ....	67		

Bondurant, S. O., Jr.	68	Chipman, S. S.	49
Booker, L. P.	47, 70	Chittum, J. R.	64
Books	14	Clark, C. H.	54
Boone, A. W.	39	Clark, E. H.	54, 65
Borden Award	15	Clark, G. A.	13
Committee on	53	Clark, L.	54
Boren, R. B.	68	Clark, S. L.	13
Bouzard, W. C.	67	Clement, J. E.	67
Bovill, J. C.	39	Clinical Examination	9
Bowen, J. L.	69	Microscopy	9, 31
Bowers, M. A., Jr.	48	Clinics, Out-Patient	6
Bowles, R. M.	69	Private Diagnostic	6
Boyarsky, S.	40	Cluff, L. E.	29
Bradley, R.	54	Cobb, C. H.	54
Bradway, J. B.	50	Cobey, W. G.	68
Brandon, J. R.	39	Coggeshall, B. E., Jr.	69
Brandy, J. R., Jr.	67	Coggins, D. F. R.	70
Brass, P.	69	Coggins, W. J., Jr.	70
Brewer, J. M., Jr.	67	Cohen, H. J.	67
Brewer, S. S., Jr.	69	Cohen, L. D.	32
Brice, G. W., Jr.	68	Cohn, D. V.	19
Bridges, R. M.	68	Cole, E. E., Jr.	34
Broadbent, T. R.	39	Coleman, B. P.	35, 70
Brock, C. L.	67	Collins, J. P.	39
Brock, J. S.	40, 70	Commencement, Dates	4
Brockmann, J. L.	68	Fees	14
Brown, I. W., Jr.	38, 62	Committees	52, 53
Brown, M.	60	Compton, J. R.	35
Brown, M. S.	29	Conant, N. F.	21, 48, 52
Brown, W. G.	29	Connor, R. G.	39
Bruce, M. N.	41	Conover, R. E.	70
Bryant, G. N., Jr.	68	Constantine, T. M.	67
Bryson, T. D.	50	Cooper, A. D.	27, 49
Buckley, C. E., III	67	Cooper, F. B.	69
Bufkin, J. H.	53, 54, 65	Corales, R. H., Jr.	39
Bugg, E. I., Jr.	37	Corner, G. W.	13
Buie, R. M.	27	Costner, A. N.	39
Bullard, L. F., Jr.	68	Covington, A. M.	40
Burks, H. L.	69	Cox, H. D.	47
Burns, T. W.	29	Cox, H. L.	69
Butler, W. G., Jr.	68	Craddock, J. G., Jr.	67
Caffey, J. W.	68	Craig, H. W.	22
Cahoon, J. B., Jr.	43, 63	Craig, R. L.	32, 62
Cain, F. C., Jr.	68	Crane, B. C.	57
Caldwell, R. S.	40	Crane, G. W.	29
Calendar	3, 4	Cranford, J. A., Jr.	70
Callaway, J. L.	24, 53, 65	Crawley, H. M.	53
Campbell, F. H.	39	Creadick, R. N.	52
Campbell, L. L.	30	Crenshaw, R. N.	54
Campbell, M. B.	60	Crevasse, L. E., Jr.	67
Campbell, P. C.	27	Crowder, J. N.	69
Carr, H. J., Jr.	67	Cummings, E. H.	43
Carroll, R. C.	32	Currens, J. H.	13
Carter, B.	44, 52, 53	Curriculum, Committee on	52
Carter, D. D.	29	School of Medicine	8
Carter, N. B.	68	First-Year	9
Cason, M. L.	47	Second-Year	9
Cassel, C.	27	Third-Year	9
Castle, C. H.	30, 70	Fourth-Year	9
Casto, D. L.	68	Curtis, T. E.	70
Catlett, C. C.	59	Cuyler, W. R.	45
Cebe, B. M.	65	Dabney, M. Y.	12
Certificate, of Graduate Dietitian	57	Dai, B.	31
Chambers, R. E.	69	Danforth, C. H.	12
Chandhuri, S.	29	Daniel, T. M.	70
Chase, G. O.	70	Davenport, C.	69
Chemistry, Requirement in	11	David, N. J.	69
Chick, E. W.	63	Davidson, N. W.	69

Davidson, W. D. ....	69	Executive Committee, Schools of	
Davis, A. V. O. ....	67	Medicine and Nursing .....	52
Davis, C. H., Jr. ....	40	Expenses, School of Medicine .....	14
Davison, A. T. S. ....	47		
Davison, W. C. ....	47, 52, 53	Facilities of the Hospital .....	5
Davison, W. T. ....	39	Fair, W. L. ....	71
Decker, E. B. ....	30	Farrar, J. ....	54
Dees, S. T. ....	69	Farrar, M. P. ....	54
Dees, S. C. ....	46	Fees, Athletics .....	14
Degrees, B.S. (Medicine) .....	10	Commencement .....	14
B.S. (Nursing) .....	57	Diploma .....	14
M.D. ....	10	Health .....	14
DeLaughter, G. D., Jr. ....	67	Nat'l Board Medical Examiners.....	14
DeMaria, W. J. A. ....	47	School of Medicine .....	14
Deutistry .....	43	School of Nursing .....	57
Departments of Instruction .....	16-51	Fellowships, Frederic M. Hanes.....	15
DePass, S. W. ....	67	Felts, J. R., Jr. ....	54
DeTurk, W. E. ....	21	Ferguson, G. B. ....	37
Diagnostic Clinic .....	6	Fetter, B. F. ....	23
Dick, M. ....	21, 25	Fieldman, A. ....	30
Dicks, R. L. ....	54	Final Clinical Examinations .....	9, 10
Dietetics, School of .....	57	Finch, C. B. ....	67
Dimmette, J. E. ....	70	Fink, C. W. ....	71
Diploma, of Graduate Nurse.....	57	First Semester .....	9
Fees .....	14	First-Year, Curriculum .....	9
Doan, C. A. ....	13	Students .....	67, 68
Doctor of Medicine .....	10	Fishel, J. L. ....	68
Donovan, M. L. ....	64	Fisher, M. L. ....	33
Dortch, H., Jr. ....	23	Fitzgerald, W. C. ....	27
Drake, D. E. ....	48, 71	Flanagan, J. F. ....	68
Dratz, A. F. ....	19	Fleming, W. J. ....	27
Duckett, H. C., Jr. ....	45	Fletcher, R. V. ....	13
Duke, Angier B. Memorial .....	15	Flinchum, D. ....	39
Duke, J. B. ....	5	Flowe, B. H. ....	40
Duke, K. L. ....	17	Flowers, E. S. ....	64
Duke Hospital, Administration .....	56	Floyd, M. A. ....	67
Facilities .....	6	Fogleman, R. L., Jr. ....	68
Dunlap, E. B., Jr. ....	12	Forbes, R. D. ....	13
Duque, O. ....	23	Forbus, W. D. ....	22, 50, 52, 53
		Foreword .....	2
Eadie, G. S. ....	20, 52	Forrester, E. N. ....	67
Eagle, W. W. ....	37	Fourth-Quarter Schedule .....	9, 10
Earley, O. M. ....	68	Fourth-Year Students .....	70, 71
Easley, E. B. ....	45	Fowler, W. R. ....	68
Easterling, J. G. ....	71	Frazier, J. W., Jr. ....	69
Easterling, W. S. ....	36	Free Time .....	9, 10
Ebert, I. ....	66	Frenzel, C. H. ....	54
Edwards, B. F. ....	40	Friedman, E. ....	35
Edwards, G. A. ....	29	Friend, L. E. ....	67
Edwards, I. K. ....	68	Fromm, S. R. ....	30
Edwards, J. L. ....	23	Fuller, M. B. ....	65
Electives .....	9, 10	Fulton, M. N. ....	13
Elftmon, S. L. ....	27	Funds, Loan .....	15
Elliott, J. F. ....	67	Futrell, M. F. ....	69
Ellis, F. W. ....	71		
Emlet, J. R. ....	40	Gaddy, G. D. ....	40
Engel, F. L. ....	21, 25, 52	Gailey, H. A. ....	39
Engel, M. F. ....	71	Gardenier, M. L. ....	59
English, Requirement in .....	11	Gardner, C. E. ....	36, 52, 53
Entrance, Requirements for .....	11	Gardner, G. H. ....	12
Epperson, J. H. ....	49	Garlington, L. N. ....	68
Evans, E. G. ....	71	Garrett, Anne S. ....	54
Evans, E. M., Jr. ....	68	Garrett, F. ....	35
Evans, W. C., Jr. ....	68	Garrett, S. R. ....	69
Everett, J. W. ....	17	General Statement .....	5
Ewy, H. H. ....	71	General Surgery .....	40
Examinations, Clinical .....	9, 10	Georgiade, N. G. ....	40
Committee on .....	52	Gibbes, J. H. ....	13
		Gibbes, R. W. ....	68

Gibson, W. C. ....	49	Hitch, J. M. ....	26
G. I. Bill of Rights .....	56	Hobbs, M. M. ....	35
Gill, A. J. ....	13	Hobgood, R. N. ....	54
Gillen, A. J. ....	35	Hohman, L. B. ....	31, 52, 53
Ginn, S. A. ....	34	Holder, A. B. ....	67
Glad, A. J. ....	19	Holland, B. C. ....	26
Glasgow, J. M. ....	34	Holland, H. C. ....	67
Glasson, J. ....	39	Holland, M. C. ....	71
Gleason, W. L. ....	68	Hollingshead, W. H. ....	13
Glenn, J. C. ....	63	Holman, E. F. ....	12
Glenn, J. F. ....	68	Honig, E. I. ....	71
Glenn, L. A. ....	60	Hooker, D. ....	13
Goldner, J. L. ....	38	Horne, F. G. ....	27, 60, 71
Goldsmith, J. ....	33	Hornsby, A. P. ....	43
Goldstone, S. ....	35	Horsley, H. T. ....	67
Gomez, A. C. ....	69	Hospital, Administration, School of .....	56
Gore, J. P. ....	67	Administrative Committee .....	53
Gorsuch, T. L. ....	30, 71	Facilities .....	5
Gould, K. G., Jr. ....	67	Records, Committee .....	52
Government, Student .....	7	Staff .....	54
Graham, H. P. ....	69	Hough, G., III .....	39
Graham, W. A. ....	45	Hours, of Study .....	9, 10
Green, I. ....	19	Howard, R. L. ....	66
Green, P., Jr. ....	71	Howell, D. A. ....	47
Greenhill, M. H. ....	32, 53	Hunter, M. B. ....	29, 30
Grimson, K. S. ....	36, 52, 53		
Grine, M. J. ....	60	Illustration, Medical .....	65
Gynecology .....	44	Immunology .....	21
		Ingram, J. M., Jr. ....	45
Hagerty, R. J. ....	40	Inman, C. E. ....	71
Hair, T. E., Jr. ....	67	Instruction, Departments of .....	16, 52
Hakala, M. T. ....	19	Schedule of .....	9, 10
Hall, F. G. ....	20, 52, 53	Internships .....	55
Hall, H. E. ....	60	Committee on .....	52
Hall, K. D. ....	68	Postgraduate .....	56
Haltiwanger, E., Jr. ....	30, 71	Ira, G. H., Jr. ....	67
Hamblen, E. C. ....	44	Irwin, C. E. ....	37
Hampton, A. G., Jr. ....	69		
Hamrick, L. W., Jr. ....	29	Jackson, B. J. N. ....	47, 71
Handler, P. ....	18, 52	Jackson, B. T. ....	67
Hanes, K. F. ....	71	Jackson, E. C. ....	66
Hanes, F. M., Fellowships .....	15	Jackson, J. O. ....	34
Hansen-Prüss, O. C. E. ....	24, 60	Jackson, M. T. ....	30, 71
Hanson, A. E. ....	13	Jacobs, J. E. ....	37
Hanson, C. A. ....	71	Jaeger, C. A. ....	30, 71
Harris, G. P. ....	54	Jaeger, T. ....	12
Harris, J. S. ....	18, 46, 52, 53	James, C. A. ....	64
Hart, D. ....	36, 52, 53	Jeans, P. C. ....	12
Hartley, J. P. ....	69	Jelks, E. ....	12
Hassell, H. L. ....	43, 63	Jeter, R. V. ....	69
Haworth, S. E. ....	68	Johnson, R. H., Jr. ....	43
Health, Student .....	7	Johnson, R. S. ....	47
Hedge, R. H., Jr. ....	67	Johnston, D. H. ....	71
Heimberg, M. ....	19	Johnston, R. L. ....	13
Helms, W. K., Jr. ....	67	Jones, C. C., Jr. ....	27
Hendrix, J. P. ....	25, 53	Jones, C. P. ....	45
Henry, R. B., Jr. ....	30	Jones, J. D. ....	67
Herron, E. A. ....	54	Jones, P. H., Jr. ....	13
Hershberger, R. L. ....	30, 71	Jones, W. B. ....	67, 69
Hetherington, D. C. ....	17	Jordan, K. L. ....	39
Hewitt, W. C., Jr. ....	67	Junior Medicine .....	9
Hiatt, E. P. ....	71	Students .....	69
Hiatt, J. S. ....	27	Surgery .....	9
Hiatt, R. P. ....	71		
Hickam, J. B. ....	25	Kaicher, T. V. ....	69
Hicks, J. N. ....	68	Kaiser, H. L. ....	53, 54, 64
Hill, P. E. ....	67	Kamin, H. ....	19
Hillman, C. H. ....	68	Kandel, R. F. ....	71
Histology .....	9	Kaplan, S. R. ....	33

Karper, H. ....	22	Lyons, W. R. ....	40
Kawchak, J. ....	69	Lyday, W. D. ....	69
Keck, C., Jr. ....	68		
Kelley, J. M., Jr. ....	67	McAin, H. M., Jr. ....	69
Kelly, J. W. ....	13	McBryde, A. M. ....	46
Kelly, R. A., Jr. ....	67	McCall, J. B., Jr. ....	69
Kempner, W. ....	25	McCall, M. A. ....	70
Kenaston, T. C., Jr. ....	67	McCanless, E. E. ....	47
Kent, A. H. ....	69	McCann, W. S. ....	13
Kerby, G. P. ....	26	McCarley, B. P. ....	70
Kerner, J. W. ....	12	McClung, E. ....	70
Kernodle, D. R. ....	69	McCracken, J. ....	28
Kernodle, G. W. ....	47	McCrea, F. D. ....	20, 52
Kerr, W. R. ....	45	McFadyen, S. R. ....	30, 71
Kibler, R. F. ....	29	McGavran, E. G. ....	48
Kimmelstiel, R. ....	69	McGee, H. H., Jr. ....	71
Kindler, J. ....	69	McGerity, J. L. ....	67
King, F. P. ....	29	McGill, C. ....	13
King, J. T., Jr. ....	13	McGowan, J. L. ....	61
Kingsbury, E. P. ....	47	McGraw, T. A. ....	30
Kinross-Wright, V. ....	33	McIntosh, H. D. ....	30
Kirby-Smith, H. T. ....	13	McMains, F. C. ....	39
Kirkland, E. S. ....	60	McMurray, C. M. ....	28
Kline, B. S. ....	13	McNeely, I. H. ....	69
Klopper, W. G. ....	35	McPherson, H. T. ....	30
Kornhouser, I. I. ....	13	McSwain, G. H. ....	40
Koury, G. E. ....	29	Mabe, P. A., Jr. ....	69
Kratz, R. P. ....	40	Mabrey, E. B. ....	69
Kraycirik, E. T. ....	29	Magee, G. F. ....	67
Kubie, L. S. ....	13	Magill, F. B. ....	70
Kunkle, E. C. ....	25	Magruder, W. W. ....	35
		Mairs, D. A. ....	45
LaBarre, W. ....	35	Major, R. H. ....	13
Laboratory, Technique, course in ....	62	Mandanis, J. P. ....	71
Lange, R. L. ....	30	Mangum, J. F. ....	71
Langley, T. E. ....	70	Manness, P. ....	47
Larsh, J. E., Jr. ....	48	Marder, G. ....	70
Larson, C., Jr. ....	12	Margolis, G. ....	22, 52
Leder, I. ....	19	Markee, J. E. ....	52, 53, 17
Legal Medicine and Toxicology ....	50	Martin, E. W. ....	53, 54, 57
Legerton, C. W., Jr. ....	27	Martin, R. C. ....	54, 60
Lewis, J. ....	64	Martin, S. P. ....	21, 26
Lewis, J. H. ....	26	Martzloff, K. H. ....	13
Library ....	6	Masterson, B. ....	43, 63
Committee on ....	52	Matthews, M. ....	54
Record ....	64	Mattox, H. E., Jr. ....	67
Lightsey, R. B. ....	59	Mayer, W. F. ....	13
Liles, D. R. ....	57	Mebane, G. Y. ....	68
Link, R. J. ....	70	Medical, Art and Illustration ....	65
List of Medical Students ....	67, 71	Art and Illustration Committee ....	53
Little, S. W. ....	35	Care ....	7
Loan Funds ....	15	Journals ....	6
Lockhart, D. A. ....	47, 71	Military Science and Tactics ....	7
Lockhart, J. K. ....	54	Record Library ....	65
London, A. H., Jr. ....	47	Social Service ....	59
Lorenzen, R. F. ....	40	Medicine ....	24
Losin, S. ....	67	Doctor of ....	10
Lourie, H. ....	70	Junior ....	9
Lovell, W. F. ....	27	Senior ....	9
Lowenbach, H. ....	32	Mees, T. H. ....	30
Ludlow, E. A. ....	67	Meiselman, R. K. ....	69
Luzadre, J. H. ....	71	Melero, A. T. ....	71
Lyman, K. R. ....	35	Melton, R. A. ....	68
Lyman, R. S. ....	31, 52, 33	Menefee, E. E., Jr. ....	25
Lynch, E. ....	35	Mertz, J. E. ....	71
Lynch, E. A. ....	59	Metcalf, B. H. ....	69
Lynch, G. C. ....	66	Meyer, G. W. ....	70
Lynn, W. S., Jr. ....	30	Meyer, L. C. ....	39
		Michaels, M. J. ....	70



Miller, A. T., Jr. ....	70	Perry, W. J. ....	70
Miller, L. S. ....	43	Persons, E. L. ....	25, 48, 53
Miller, O. L. ....	38	Peschel, E. ....	29
Monmaerts, W. F. H. M. ....	19	Peschel, R. L. ....	29
Moody, J. D. ....	39	Pfeiffer, J. B., Jr. ....	26
Moody, W. A. ....	70	Pharmacology ....	20
Moore, D. P., Jr. ....	70	Phillips, B. J. ....	45
Morgan, T. E., Jr. ....	68	Phillips, R. H. ....	33
Morris, F. A., Jr. ....	70	Physical Diagnosis ....	9
Mosby Awards ....	16	Physical Therapy ....	63
Mott, H. J. E. ....	70	Committee on ....	33
Mulholland, H. B. ....	13	Physics, Requirement in ....	11
Muller, J. C. ....	30	Physiology ....	20
Musekamp, G. H. ....	68	Pickens, M. I. ....	54
Myology ....	21	Pickett, H. F. ....	66
Myers, J. D. ....	25	Pickrell, K. L. ....	36, 53
		Pierce, E. C., Jr. ....	69
Nahn, H. ....	57	Pierson, G. H., Jr. ....	68
National Board of Medical Examiners. ....	14	Pinck, R. L. ....	43
Nesbitt, W. R. ....	13	Pine, I. ....	33
Neuropsychiatry ....	31	Pinsker, H. ....	68
Neurosurgery ....	42	Plastic Surgery ....	42
Newborg, B. C. ....	30	Podger, K. A. ....	45
Newell, E. T. ....	40	Politano, V. A. ....	40
Newman, E. G. ....	68	Pollard, L. W., Jr. ....	69
Niblock, F. C., Jr. ....	69	Poole, A. K. ....	12
Nicholson, M. D. ....	57	Poole, R. F., Jr. ....	47
Nicholson, W. M. ....	25, 52, 53	Pope, H. ....	22, 49
Nixon, P. I. ....	13	Poplin, E. M. ....	64
Nursing, School of ....	57	Porter, F. R. ....	52, 53, 54
		Postgraduate, Clinics ....	56
Obstetrics ....	44	Study (Medicine) ....	56
Odom, G. L. ....	37, 52	(Nursing) ....	57
Ophthalmology ....	41	Poston, M. A. ....	22, 62
O'Neill, J. F. ....	68	Potter, C. R., Jr. ....	68
Orgain, E. S. ....	25	Powell, L. W., Jr. ....	23
Orthopaedics ....	9, 41	Prall, C. E. ....	54
Osler, W. ....	6	Preventive Medicine ....	48
Otolaryngology ....	41	Private Diagnostic Clinic ....	6
Out-Patient Clinic ....	6	Pruett, C. D. ....	71
Committee on ....	52	Pryor, J. R. ....	70
Overton, D. H., Jr. ....	69	Psychobiology ....	9
		Public Health ....	48
Paar, J. A. ....	70	Pudenz, R. H. ....	12
Padua, A. C. ....	45	Pyne, J. M. ....	53, 54
Palumbo, L. ....	45		
Parapid, N. V. ....	71	Quarters ....	4, 9-10
Parasitology ....	9		
Park, C. W. ....	70	Radiology ....	43
Parker, E. F., Jr. ....	13	Ragland, R. B. ....	71
Parker, M. V. ....	69	Ramage, R. C. ....	12
Parker, R. T. ....	45	Ramey, J. W. ....	68
Parkerson, G. R., Jr. ....	69	Ramsey, L. H. ....	30
Parrish, R. G. ....	19	Raney, R. B. ....	37, 52
Past, S. A., Jr. ....	65	Rankin, R. B., Jr. ....	69
Pathology ....	22	Rankin, W. S. ....	54
Patients, Public Ward and Private. ....	6	Raper, E. S. ....	54
Patton, R. G. ....	68	Rauh, A. E. ....	33
Paullin, J. E. ....	12	Ravitz, L. J. ....	35
Pearse, A. S. ....	48	Reamer, I. T. ....	54
Pearse, R. L. ....	45	Record Library ....	64
Pederson, R. L. ....	43	Records, Committee on ....	53
Pediatrics ....	70	Reed, C. G. ....	70
Peedin, J. H., Jr. ....	46	Reeves, R. J. ....	54, 63
Peele, T. L. ....	17, 26	Regional Representatives ....	12-13
Peete, C. H., Jr. ....	45	Regulations, Fees and Expenses ....	14
Pelton, M. I. ....	59	Reinuth, O. M. ....	70
Penfield, W. ....	12	Remus, L. E., Jr. ....	71
Penrod, K. E. ....	21	Rent, rooms ....	14

Representatives, Regional .....	12-13	Sealy, W. C. ....	37
Requirements, B.S. Degree (Medicine)...	10	Second Semester .....	9
B.S. Degree (Nursing) .....	57	Second-Year, Curriculum .....	9-10
Entrance .....	11	Students .....	68
M.D. Degree .....	10	Sellers, A. M. ....	71
School of Dietetics .....	57	Semmes, R. E. ....	13
School of Nursing .....	57	Senior, Medicine .....	9-10
Research Fellowships .....	15	Students .....	70
Reserve Officers Training Corps .....	7	Surgery .....	9-10
Residencies .....	55	Sewall, L. G. ....	32
Postgraduate .....	56	Seymour, C. F. ....	47
Reynolds, D. H. ....	71	Shaucroft, D. Y. ....	71
Rice, A. D. ....	47, 71	Shapiro, L. ....	70
Richardson, R. C. ....	64	Shapiro, O. W. ....	68
Richardson, W. P. ....	49	Sharpe, D. G. ....	38
Ridges, L. J. ....	13	Sheps, C. G. ....	49
Rippy, G. C., Jr. ....	68	Sherwood, M. M. ....	47
Roberts, L. C. ....	38	Shimm, R. A. ....	30
Roberts, W. M. ....	38	Shingleton, W. W. ....	39
Robinson, F. J. ....	30	Shirk, J. R. ....	35
Rodnan, G. P. ....	30	Shugerman, E. H. ....	68
Rodriguez, A. ....	40	Sieber, H. A. ....	28
Roll of Students .....	67-71	Sikes, Z. S., Jr. ....	33
Romero, M. V. ....	60	Silver, G. A. ....	34
Roof, A. C. ....	69	Simmons, E. C. ....	47
Room Rent .....	14	Simon, W. L. ....	54
Rosemond, M. D. ....	60	Sing, R. L., Jr. ....	68
Rosemond, R. M. ....	69	Singletary, W. V. ....	28
Ross, N. F. ....	38	Singleton, M. C. ....	64
Ross, R. A. ....	52	Skeen, M. V. ....	70
Rowe, C. R., Jr. ....	40	Skinner, B. S. ....	47
Rowland, A. F. ....	60	Skipworth, G. B. ....	68
Rucker, D. P. ....	45	Smith, A. G. ....	23
Rucker, M. P. ....	45	Smith, D. T. ....	21, 24, 48, 52, 53, 60
Ruffin, C. L. ....	45	Smith, G. B., Jr. ....	70
Ruffin, J. M. ....	24, 52	Smith, G. G. ....	64
Rundles, R. W. ....	25, 52	Smith, J. G., Jr. ....	71
Rupp, J. C. ....	19	Smith, J. J. L. ....	70
Rutledge, M. L. ....	47	Smith, J. L. ....	54
Ryan, J. M. ....	29	Smith, P. W. ....	29, 62
		Smith, S. G. ....	35
Sager, S. O. ....	69	Snively, M. H. ....	54, 60
Saint John, J. H. ....	28	Social Service .....	59
Sanger, B. J. ....	13	Committee on .....	53
Sarazen, P. M., Jr. ....	47	Somers, J. E. ....	69
Savitt, A. J. ....	70	Spach, M. S. ....	68
Sawyer, C. H. ....	17	Spivey, L. M. ....	30
Schedule of Instruction .....	9-10	Spring Quarter .....	4, 9
Scheive, J. F. ....	28	Staff, Administrative and Technical.....	54
Schiebel, H. M. ....	39	Medical School and Hospital.....	16-67
Schipke, R. E. ....	47	Stallings, T. L., Jr. ....	68
Schlayer, C. ....	29	Stanley, G. D. ....	30, 71
Schmidt, E. D. ....	71	Starke, H. ....	26
Schmidt, F. K. ....	40	Stauffer, C. ....	40
Schnoor, E. E. ....	71	Stead, E. A., Jr. ....	24, 52, 53
Scholarships .....	15	Stennett, C. E. ....	70
School of Dietetics .....	57	Stephen, C. R. ....	54, 60
Hospital Administration .....	56	Stewart, E. B. ....	70
Medicine .....	5	Stickel, D. L. ....	69
Nursing .....	57	Stifel, J. L. ....	13
Physical Therapy .....	64	Stocker, F. W. ....	37
Schrepfer, R. ....	45	Stoddard, L. D. ....	23
Schwartz, R. ....	66	Student Government .....	7
Schwartz, T. B. ....	26	Student Technicians, Committee on .....	52
Schwert, G. W., Jr. ....	19	Students, List of .....	67-71
Science, Bachelor of (Medicine) .....	10	First-Year Class .....	67
(Nursing) .....	57	Second-Year Class .....	68
Scientific Journals .....	6	Third-Year Class .....	69
		Fourth-Year Class .....	70

Study, Postgraduate (Medicine) .....	56	Walker, T. E. ....	47
(Nursing) .....	57	Walker, W. F. ....	40, 71
Styron, C. W. ....	26	Wallace, J. D., Jr. ....	70
Suitt, R. B. ....	32	Wallace, J. M. ....	30
Sullenberger, J. W. ....	71	Walters, P. A., Jr. ....	71
Sullivan, M. P. ....	47	Wanskner, B. A. ....	70
Sullivan, W. E. ....	13	Wanzer, S. H. ....	23
Summary of Curriculum .....	10	Waring, J. I. ....	13
Summer Quarter .....	4, 9	Warren, D. E. ....	70
Surgery .....	36	Warren, J. B. ....	71
Junior .....	9	Watkins, W. W. ....	23
Senior .....	10	Watt, T. B., Jr. ....	69
Sutherland, G. F. ....	32	Wear, J. E. ....	43
Swanson, L. E. ....	54	Webb, B. D. ....	47
Swett, Mrs. F. H. ....	52	Webster, A. C. ....	66
Syphilology .....	31	Weeks, K. D. ....	23
		Welch, G. H., Jr. ....	69
Tahan, N. G. ....	70	Welch, J. E. ....	71
Talley, W. C. ....	68	Wester, M. W., Jr. ....	70
Tannehill, A. W., Jr. ....	63	Wester, T. B. ....	43, 71
Tatom, L. ....	69	Weston, W. ....	13
Taylor, A. ....	43	White, B. T., II .....	71
Taylor, H. G. ....	33, 46, 52	White, J. W. ....	38
Taylor, H. M. ....	18, 50, 52	Whitesides, E. S. ....	40, 71
Taylor, W. J. ....	29	Wien, J. ....	53, 54, 59
Taylor, W. M. ....	13	Wiggins, B. S. ....	65
Terms, dates .....	4	Wilhoit, W. M. ....	23
Terrell, T. E. ....	69	Wilkinson, W. E. ....	34
Texter, E. C., Jr. ....	28	Williams, C. D., Jr. ....	30
Third-Year Curriculum .....	9	Williams, D. M. ....	49
Students .....	69	Williams, H. L. ....	71
Thomas, A. ....	63	Williams, J. B., Jr. ....	69
Thomas, W. L., Jr. ....	44, 58	Williams, J. L., Jr. ....	69
Thompson, F. A., Jr. ....	28	Williams, K. T. ....	68
Thompson, M. D. ....	12	Williams, L. H. ....	71
Thompson, P. C. ....	39	Willis, H. K. ....	70
Thoracic Surgery .....	42	Wills, B. B. ....	57
Tickle, D. R. ....	68	Wilson, F. K. ....	52, 53, 54, 57
Timmons, B. F. ....	40	Wingfield, R. T. ....	71
Timmons, J. L. ....	59	Winslow, F. E., Jr. ....	69
Titus, B. R. ....	54	Winter Quarter .....	4, 9
Towbin, E. J. ....	30	Withers, W. B. ....	39
Toxicology .....	50	Wolf, R. L. ....	70
Travis, B. L. ....	70	Woodbury, P. S. ....	69
Trent, Mrs. J. C. ....	52	Woodhall, B. ....	37
Truscott, B. L. ....	40	Woods, J. W. ....	23
Tuition, Medical Record Library .....	64	Woolsey, D. S. ....	13
School of Medicine .....	14	Wooten, E. J. H. ....	47
School of Nursing .....	57	Wrenu, E. R., Jr. ....	39
School of Physical Therapy .....	63	Wright, DeW. ....	53, 54
School of X-ray Technology .....	63	Wright, H. L., Jr. ....	70
Turner, V. H. ....	45	Wright, J. J. ....	49
		Wylie, R. M. ....	13
Undergraduate Cancer Program .....	50		
Underwood, R. S. ....	71	X-Ray Technology .....	63
Urban, A. J. ....	69		
Urology .....	41	Yearick, E. ....	57
		Young, C. G. ....	69
Vacation Dates .....	4	Young, D. A. ....	34
Venecia, N. F. ....	60	Young, R. U. ....	70
Verner, J. V., Jr. ....	68	Yudell, R. B. ....	63
Vestal, T. A. ....	69		
Vetter, J. S. ....	63	Zang, L. C., Jr. ....	47
Vingiello, R. R. M. ....	43	Zavaleta, A. ....	23
Voyles, C. M., Jr. ....	23		







**BULLETIN**  
**OF**  
**DUKE UNIVERSITY**



**The School of Nursing**  
**The Division of Nursing Education**

**ANNOUNCEMENTS FOR 1951-52**

**VOLUME 23**

**April, 1951**

**NUMBER 6-B**

# Annual Bulletins

FOR GENERAL BULLETIN of Duke University, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF UNDERGRADUATE INSTRUCTION, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE COLLEGE OF ENGINEERING, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES, apply to *The Dean of the Graduate School*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF FORESTRY, apply to *The Dean of the School of Forestry*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF LAW, apply to *The Dean of the School of Law*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF MEDICINE, apply to *The Dean of the School of Medicine*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF NURSING, apply to *The Dean of the School of Nursing*, Duke University, Durham, N. C.

FOR BULLETIN OF THE DIVINITY SCHOOL, apply to *The Dean of the Divinity School*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SUMMER SESSION, apply to *The Director of the Summer Session*, Duke University, Durham, N. C.

Published by Duke University monthly except in July, August, September, and December. Entered as second-class matter March 25, 1929, at the Post Office of Durham, North Carolina, under the Act of August 24, 1912.

BULLETIN  
OF  
DUKE UNIVERSITY

THE SCHOOL OF NURSING



1951-1952

DURHAM, NORTH CAROLINA  
1951

# Calendars of the Colleges



## *Summer Session*

1951

- |      |       |  |
|------|-------|--|
| June | 12    | Tuesday—Registration for first term of Summer Session.       |
| June | 13    | Wednesday—Instruction begins for Summer Session, first term. |
| July | 20    | Friday—Examinations begin for first term of Summer Session.  |
| July | 23    | Monday—Instruction begins for Summer Session, 3 weeks term.  |
| June | 24-30 | Sunday-Saturday—Nursing Education Workshop.                  |

## *Academic Year 1950-51*

- |       |    |   |
|-------|----|---|
| Sept. | 13 | Thursday, 9:00 A.M.—Baker House open to Freshmen.   |
| Sept. | 14 | Friday—Registration, orientation, School of Nursing.  |
| Sept. | 18 | Tuesday—Registration and matriculation of new students with advanced standing, Woman's College. |
| Sept. | 20 | Thursday—Instruction begins for graduate nurses.  |
| Oct.  | 8  | Monday—Assembly of all students in School of Nursing.   |
| Nov.  | 22 | Thursday—Thanksgiving Day: a holiday.   |
| Dec.  | 11 | Tuesday—Founders Day.   |
| Dec.  | 20 | Thursday, 5:00 P.M.—Christmas recess begins (campus classes and first-year students).           |

1952

- |       |    |   |
|-------|----|---|
| Jan.  | 3  | Thursday, 8:00 A.M.—Instruction is resumed.   |
| Jan.  | 7  | Monday, 7:45 P.M.—All student assembly.   |
| Jan.  | 16 | Wednesday—Mid-year examinations begin for graduate nurses.                            |
| Jan.  | 26 | Saturday—Mid-year examinations end.   |
| Jan.  | 28 | Monday—Registration and matriculation of new graduate nurse students.                 |
| Jan.  | 29 | Tuesday—Last day for matriculation for second semester.                               |
| Jan.  | 30 | Wednesday—Second semester begins.   |
| March | 27 | Saturday, 12:30 P.M.—Spring vacation begins (campus classes and first-year students). |
| March | 31 | Monday, 8:00 A.M.—Instruction is resumed.   |
| May   | 19 | Monday—Final examinations for second semester begin.                                  |
| May   | 29 | Thursday—Final examinations end.  |
| May   | 31 | Saturday—Commencement begins: Senior Class Day, meeting of the Board of Trustees.     |
| June  | 1  | Sunday—Commencement Sermon.   |
| June  | 2  | Monday—Commencement Address; Graduating Exercises.                                    |

# Officers of Administration



## *General Administration*

EDENS, ARTHUR HOLLIS, B.Ph., A.M., M.P.A., Ph.D., LL.D. <i>President of the University</i>	West Campus
FLOWERS, ROBERT LEE, A.M., LL.D. <i>Chancellor of the University</i>	West Campus
WANNAMAKER, WILLIAM HANE, A.B., A.M., Litt.D. <i>Vice-Chancellor of the University</i>	West Campus
GROSS, PAUL MAGNUS, B.S., A.M., Ph.D. <i>Vice-President in the Educational Division</i>	Hope Valley
JORDAN, CHARLES EDWARD, A.B., LL.D. <i>Vice-President in the Division of Public Relations and Secretary of the University</i>	813 Vickers Avenue
HERRING, HERBERT JAMES, A.B., A.M., LL.D. <i>Vice-President in the Division of Student Life and Dean of Trinity College</i>	Myrtle Drive
BROWER, ALFRED SMITH, A.B. <i>Business Manager and Comptroller</i>	1550 Hermitage Court
MARKHAM, CHARLES BLACKWELL, A.B., A.M. <i>Treasurer of the University</i>	204 Dillard Street

## *School of Nursing*

WILSON, FLORENCE K., A.B., R.N., M.A. <i>Dean of the School of Nursing</i>	Faculty Apartments
JEFFERS, FRANCES C., A.B., A.M. <i>Assistant Professor of Nursing Education</i>	Baker House
CLARK, LELIA, R.N., B.S., M.A. <i>Assistant Professor of Nursing Education</i>	Baker House
MASSEY, LUCY E., R.N., B.S., M.A. <i>Assistant Professor of Public Health Nursing</i>	Baker House

## *Division of Nursing Education*

### DEPARTMENT OF EDUCATION

BRINKLEY, ROBERTA FLORENCE, A.B., M.A., Ph.D. <i>Dean of Woman's College</i>	East Campus
JENKINS, MARIANNA, A.B., A.M., Ph.D. <i>Associate Dean of Undergraduate Instruction, Woman's College</i>	2304 Cranford Road
PERSONS, MRS. ELIZABETH ANDERSON, A.B., A.M. <i>Director of Admissions, Woman's College</i>	612 Swift Avenue



- CARR, JOHN W., JR., A.B., A.M., Ph.D.  
*Chairman, Department of Education* 926 Monmouth Avenue
- SMITH, DOROTHY M., R.N., B.S., M.S.  
*Director, Division of Nursing Education* 205 Cornwallis Road
- INGLES, THELMA, R.N., B.A., M.A.  
*Assistant Director, Division of Nursing Education* 1507 W. Pettigrew Street
- MOSER, LOUISE G., A.B., R.N., M.N.  
*Assistant Professor Nursing Education and Director of  
 the Program in Advanced Psychiatric Nursing* 1004 Markham Avenue

### *Committee on the Baccalaureate Degree for Nurses*

- |                              |                |
|------------------------------|----------------|
| FLORENCE K. WILSON, Chairman | I. E. GRAY     |
| ROBERTA F. BRINKLEY          | DAVID T. SMITH |
| W. C. VOSBURGH               |                |

### *Executive Committee of the Schools of Medicine and Nursing*

- |                  |                    |
|------------------|--------------------|
| BAYARD CARTER    | R. S. LYMAN        |
| W. C. DAVISON    | J. E. MARKEE       |
| W. D. FORBUS     | ROSS PORTER        |
| F. G. HALL       | D. T. SMITH        |
| DERYL HART       | E. A. STEAD, JR.   |
| LESLIE B. HOHMAN | FLORENCE K. WILSON |

### *Committees of the School of Nursing*

- Admissions:* F. K. Wilson, Chairman, B. Bason, F. Jeffers, L. Massey, M. Osterman, J. Truscott.
- Curriculum:* D. Smith, Chairman, R. Adams, M. Anderson, E. Botwin, H. Brock, K. Carson, R. Carter, B. Eckert, J. Fleming, O. Galloway, W. Henderson, T. Ingles, F. Jeffers, L. Massey, M. Mitchell, L. Moser, M. Osterman, F. K. Wilson.
- Evaluation:* R. Adams, Chairman, H. Abbott, H. Brock, R. Carter, B. Eckert, J. Fleming, O. Galloway, W. Henderson, F. Jeffers, L. Moser, S. Prevatt, D. Smith, J. Suitt, J. Truscott, F. K. Wilson.
- Library:* D. Luther, Chairman, H. Abbott, M. Anderson, K. Carson, M. Mitchell, S. Prevatt.
- Procedure:* M. Crawley, Chairman, B. Barnhart, B. Bason, E. Botwin, J. Bryant, K. Carson, G. Cheek, L. Clark, H. Farrar, M. Sherwood.

# Instructional Staff



## *School of Nursing*

FLORENCE K. WILSON, B.A., M.A., R.N.

*Professor of Nursing Education*

University of Michigan, B.A., 1913; Vassar Training Camp for Nurses, 1918; Diploma, City Hospital School of Nursing, 1920; Western Reserve University, M.A., 1930; Associate Professor of Nursing Education, Syracuse University, 1943-45; Director of School of Nursing, Syracuse Memorial Hospital, 1937-1945; Instructor and Supervisor of Medical Nursing, New York Hospital, 1934-37; Instructor and Supervisor, Western Reserve University School of Nursing, 1923-29; Research Assistant, Committee on Grading of Schools of Nursing, 1929-30; Professor of Nursing Education, 1947; *Dean of School of Nursing, 1946—.*

LELIA R. CLARK, R.N., B.S., M.A.

*Assistant Professor of Nursing Education*

Diploma, Mount Sinai Hospital School of Nursing, Philadelphia, Pa., 1932; Head Nurse, Mount Sinai Hospital, 1932-34; Night Obstetrical Supervisor, Mount Sinai Hospital, 1934-36; Night Supervisor, Mount Sinai Hospital, 1936-38; Certificate, Obstetrical Nursing, New York Hospital, New York, N. Y., 1939; Director of Nursing, Memorial General Hospital, Kinston, N. C., 1940-42; Army Nurse Corps, USA and ETO, 1942-45; Director of Nursing, Pitt General Hospital, Greenville, N. C., 1946-47; B.S. Degree, Columbia University, New York, N. Y., 1948; M.A., Columbia University, New York, N. Y., 1949; *Assistant Professor of Nursing Education, Duke Hospital, 1949—.*

FRANCES C. JEFFERS, A.B., A.M.

*Assistant Professor of Nursing Education and Counselor*

A.B., University of Missouri, 1927; Secretary to the President, Haverford College, Haverford, Pa., 1930-40; Assistant Personnel Director, University of Washington, Seattle, Washington, 1942; Evening Director of Student Activities House, College of City of New York, New York City, 1944-45; A.M., Teachers College, Columbia University, 1945; Counselor to Women, University of Alabama, University, Ala., 1945-47; *Assistant Professor of Nursing Education and Counselor, Duke University School of Nursing, 1947—.*

LUCY E. MASSEY, R.N., B.A., M.A.

*Assistant Professor of Public Health Nursing*

B.A., Randolph-Macn Women's College, 1918; Diploma, Mount Sinai Hospital School of Nursing, N. Y., 1921; M.A., Teachers College, Columbia University, 1941; Public Health Nurse, Edgecombe Co., N. C., 1921-23; Ass't Editor, "Hospital Social Service," 1923-24; Field Nurse, Kentucky State Board of Health, 1925-28; Supervising Nurse, Rockefeller Foundation Training Station, Indianola, Miss., 1928-30; Professor of Public Health Nursing, Richmond School of Social Work and Public Health, 1931-32; Ass't State Supervising Nurse, Tennessee State Health Dept., 1934-35; Ass't and Assoc. Professor of Public Health Nursing, Western Reserve University, 1935-39; Director, Eastern Area Nursing Service, American National Red Cross, 1939-40; Nurse Member, School Health Service Coordinating Unit, Mississippi State Board of Health and State Dept. of Education, 1942-46; Director, Division of Public Health Nursing, Mississippi State Board of Health, 1946-49; *Assistant Professor of Public Health Nursing, Duke Hospital, 1949—.*

DOROTHY M. SMITH, R.N., B.S., M.Ed.

*Assistant Professor of Nursing Education*

MARIE OSTERMAN, R.N., B.S., M.A.

*Assistant Professor of Nursing Education*

Diploma, University of Virginia Hospital School of Nursing, Charlottesville, Va., 1935; Private duty, 1935-37; B.S. in Nursing Education, Teachers College, Columbia University, 1939; Science Instructor, Ohio Valley General Hospital, Wheeling, West Virginia, 1930-41; M.A. in Nursing Education, Teachers College, Columbia University, 1941-42; Nursing Science Instructor, Miami Valley Hospital, Dayton, Ohio and Ohio Valley General Hospital, Wheeling, W. Va., 1942-46; Educational Director, Methodist Hospital and Memorial Hospital, Houston, Texas, 1946-49; Director of Nurses, Good Samaritan Hospital, West Palm Beach, Fla., 1949-50; *Ass't Professor of Nursing Education, Duke Hospital, 1950—.*

## N. RUTH CARTER, B.S., R.N.

*Instructor in Surgical Nursing*

B.S., Queens College, 1940-43; Diploma, The Johns Hopkins School of Nursing, 1946; Ass't Head Nurse, Acting Head Nurse, The Johns Hopkins Hospital, 1946-47; Orthopedic Staff Nurse, Charlotte Memorial Hospital, 1947; Ass't Night Supervisor, Duke University Hospital, 1947-48; Ass't in Surgical Nursing and Ass't Supervisor of Surgical Nursing Service, February 1948-Sept. 1948; *Instructor in Surgical Nursing, Duke Hospital, 1948—*.

## HATTIE MILDRED CRAWLEY, R.N., B.S.

*Instructor in Nursing Arts*

Mitchell College, Statesville, N. C., 1940-41; Diploma and B.S. in Nursing, Duke University School of Nursing, 1944; Head Nurse on Women's Medical Ward, Duke Hospital, July 1944-December 1944; Staff Nurse, Children's Hospital of Philadelphia, February 1945-April 1945; Assistant Clinical Instructor, Children's Hospital of Philadelphia, April 1945-Feb. 1946; Clinical Instructor in Pediatric Nursing and Assistant Supervisor of Pediatric Nursing Service, 1946-49; *Instructor in Nursing Arts, Duke Hospital, 1949—*.

## BARBARA ECKERT, R.N., B.S.

*Instructor in Pediatric Nursing*

Diploma, Hartford Hospital, Hartford, Conn., 1943; B.S. in Nursing Education, Duke University, 1950; Head Nurse on Pediatric Ward, Hartford Hospital, June 1943-January 1944; Navy Nurse Corps, January 1944-December 1945; Stewardess, American Airlines, December 1945-June 1947; Staff Nurse on Obstetrics, Waltham Hospital, Waltham, Mass., August 1947-January 1948; Boston University, 1948; Duke University 1948-49; *Instructor in Pediatric Nursing, Duke Hospital, 1950—*.

## JULIA FLEMING, R.N., B.S.

*Instructor in Psychiatric Nursing*

Diploma, St. Anthony's Hospital, Denver, Colo., 1931; Staff Nurse, St. Anthony's Hospital, 1931-32; Head Nurse, 1932-33; Certificate in Psychiatric Nursing, Colorado Psychopathic Hospital, 1933-34; Private Duty, 1935-42; Clinical Instructor, Wyoming General Hospital, Rock Springs, Wyo., 1942-43; B.S. Degree in Nursing Education, Colorado University, 1947; Head Nurse, Colorado Psychopathic Hospital, 1947-48; Psychiatric Affiliation, Washington School of Nursing, 1948-49; *Instructor in Psychiatric Nursing, Duke University School of Nursing, 1949—*.

## OLIVE GALLOWAY, R.N., B.S.

*Instructor in Medical Nursing*

Diploma, Emory Univ. Hospital School of Nursing, 1943; B.S., Florida State College for Women, 1945; Instructor in Nursing Arts and Science, Municipal Hospital, Tampa, Fla., 1945-47; Assistant in Principles and Practice of Nursing, Duke Hospital, 1947-50; General Staff duty, Duke Hospital, Jan. 1950-May 1950; B.S. in Nursing Education, Duke Univ., June 1950; *Instructor in Medical Nursing, May 1950—*.

## WANDA E. HENDERSON, R.N.

*Instructor in Obstetric Nursing*

Diploma, Hamot Hospital School of Nursing, Erie, Pa., 1947; Staff Nurse on Obstetric Service, Hamot Hospital, Erie, Pa., 1947-1949; Post-graduate Obstetric Course, Woman's Hospital, Detroit, Michigan, 1949; Assistant supervisor of obstetric service and clinical instructor of Obstetric Nursing, Hamot Hospital, Erie, Pa., 1949-1950; *Instructor in Obstetric Nursing, Duke Hospital, 1950—*.

## RUTH MARGUERITE ADAMS, R.N.

*Clinical Instructor in Operating Room Technique*

Diploma, University of Minnesota School of Nursing, Minneapolis, Minnesota, 1940; General Staff duty, Operating Room, Minneapolis General Hospital, 1941-42; Assistant Floor Supervisor, Operating Room, Minneapolis General, 1942-44; Instructor and Supervisor in Operating Room, Minneapolis General, 1944-47; *Clinical Instructor in Operating Room Technique, Duke Hospital, 1947—*.

## MARJORIE GOFF ANDERSON, B.S., R.N.

*Assistant in Nursing*

B.S., Florida State University, Tallahassee, Fla., 1945; Diploma and B.S. in Nursing, Duke University School of Nursing, 1948; Staff Nurse, Duke Hospital, 1949; *Assistant in Nursing, Duke Hospital, 1950—*.

BETTY GREEN BASON, R.N., B.S.

*Assistant in Nursing*

Diploma, Duke University School of Nursing, 1946; B.S. in Nursing, Duke University School of Nursing, 1947; General Duty, Duke Hospital, 1946-47; Head Nurse, Duke Hospital, 1947-49; B.S. in Nursing Education, Duke University, 1949; Instructor in Medical Nursing, 1949-50; *Assistant in Nursing, 1950—*.

HELEN E. BROCK, B.E., B.S., R.N.

*Assistant in Nursing*

B.E., Genesee State Teachers College, Genesee, N. Y., 1942; B.S., Cornell University, 1947; Diploma, Cornell University-New York Hospital School of Nursing, 1947; Clinical Instructor in Surgery, V.A. Hospital, Oteen, N. C., 1947-48; Clinical Nurse, Norburn Clinic, Asheville, N. C., 1948-49; *Assistant in Nursing, Duke Hospital, 1949—*.

ANNE C. LUTZ, R.N., B.S.

*Assistant in the Operating Room*

Diploma and B.S. in Nursing, University of Maryland School of Nursing, Baltimore, Md., 1946; Staff Nurse, Operating Room, University of Maryland Hospital, 1946-1947; Staff Nurse, Operating Room, Kapiolani Hospital, Honolulu, T.H., 1947-1948; Private Duty Nurse, Operating Room, Kapiolani Hospital, Honolulu, T.H., 1947-1948; Private Duty course in Operating Room Technique, Duke University, September 1949-May 1950; Staff Nurse, U. S. Marine Hospital, Baltimore, Maryland, July 1950-November 1950; *Assistant in the Operating Room, Duke Hospital, 1950—*.

## *Division of Nursing Education, Department of Education*

DOROTHY MARY SMITH, R.N., B.S., M.Ed.

*Assistant Professor of Nursing Education*

*Director, Division of Nursing Education*

Diploma, Quincy City Hospital, Quincy, Mass., 1936; B.S., Teachers College, Columbia University, 1941; M.Ed., Harvard University, Boston, Mass., 1947; General Duty, Quincy City Hospital, 1936; Asst Head Nurse and Head Nurse, Quincy City Hospital, 1937-41; Science Instructor, Margaret Pillsbury Hospital, Concord, N. H., 1941-42; Science and Nursing Arts Instructor (Asst), Quincy City Hospital, 1942-43; Educational Director and Science Instructor, Quincy City Hospital, 1943-47; Assistant Professor of Nursing, Duke Hospital, 1947-50; *Director, Division of Nursing Education, Duke University, 1950—*.

THELMA INGLES, R.N., B.A., M.A.

*Assistant Director, Division of Nursing Education*

B.A., University of California at Los Angeles, 1931; Diploma, Massachusetts General Hospital, 1936; M.A., Western Reserve University, 1942; Assistant Superintendent, Boston Nursery for Blind Children, 1936-37; Instructor, Burbank Hospital, Fitchburg, Mass., 1937-38; Clinic Nurse, Cleveland, Ohio, 1938-42; Head Nurse, St. Luke's Hospital, Cleveland, Ohio, 1942-43; Educational Director, University of Virginia Hospital, 1943-45; Educational Director and Acting Superintendent, Admiral Bristol Hospital, Istanbul, Turkey, 1945-48; *Assistant Director, Division of Nursing Education, Duke University, 1949—*.

EULA VIVIAN JOHNSTON, R.N., B.S., M.S.

*Instructor in Psychiatric Nursing*

Diploma, Cumberland Hospital, New York City; Bachelor of Science in Nursing Education, University of Georgia; Master of Science in Nursing Education with a major in Psychiatric Nursing, Catholic University, 1950; *Instructor in Psychiatric Nursing, Duke Hospital, 1951—*.

LUCY E. MASSEY, R.N., B.A., M.A.

*Assistant Professor of Public Health Nursing*

LOUISE G. MOSER, A.B., R.N., M.N.

*Assistant Professor of Nursing Education and Director  
of the Program in Advanced Psychiatric Nursing*

A.B., Wittenberg College, 1930; Diploma, Massachusetts General Hospital, 1936; M.N., University of Washington, 1949; Staff Nurse and Head Nurse, Sheppard and Enoch Pratt Hospital, 1936-38; Supervisor, Colorado Psychopathic Hospital, 1938-40; Instructor



in Psychiatric Nursing, University of Washington, and Educational Director, Western State Hospital, Washington, 1940-42; U. S. Army Nurse Corps, 1942-45; Instructor and Supervisor, The Neuropsychiatric Institute, University of Michigan, 1946-49; *Assistant Professor of Nursing Education and Director of the Program in Advanced Psychiatric Nursing, Duke Hospital, 1949—.*

FLORENCE K. WILSON, B.A., M.A., R.N.  
*Professor of Nursing Education*

\*HELEN NAHM, R.N., B.S., M.S., Ph.D.  
*Assistant Professor of Nursing Education*

R.N., Univ. of Missouri Sch. of Nursing, 1924; A.B., University of Missouri, 1926; M.S., Univ. of Minnesota, 1939; Ph.D., Univ. of Minnesota, 1946; Instr., Scott and White Hospital, 1927-1930; Dir., Univ. of Missouri Sch. of Nursing, 1935-1941; Dir., Hamline, Asbury Sch. of Nursing, St. Paul, Missouri, 1942-1945; *Director, Division of Nursing Education, Duke University, 1946—.*

## *Members of Other Faculties of the University Giving Instruction*

EDWIN PASCAL ALYEA, S.B., M.D., *Clinical Professor of Urology.*

S.B., Princeton, 1919; M.D., Johns Hopkins, 1923; Int. in Med., Int. and Ass't Res. in Surg., Ass't Res. and Res. in Urol., Johns Hopkins Hosp., 1923-1929; Ass't and Instr. in Surg., and Instr. in Urol., Johns Hopkins Med. Sch., 1925-1929; *Urologist, Duke Hospital, 1930—.*

WILLIAM BANKS ANDERSON, A.B., M.D., *Professor of Surgery in Charge of Ophthalmology.*

A.B., North Carolina, 1920; M.D., Johns Hopkins, 1924; Int., Union Mem. Hosp., Balto., 1924-1925; Int., Mass. Eye and Ear Infirmary, 1925-1927; *Ophthalmologist, Duke Hospital, 1930—.*

LENOX DIAL BAKER, M.D., *Professor of Surgery in Charge of Orthopaedics.*

M.D., Duke, 1933; Int. in Orth. Surg. and in Gen'l Surg.; Ass't Res. in Orth. Surg., and Res. in Orth., Johns Hopkins Hosp., 1933-1937; Res., Children's Hosp. Sch., 1936; Ass't and Instr., Orth. Surg., Johns Hopkins Med. Sch., 1935-1937; *Orthopaedist, Duke Hospital, 1937—.*

JASPER LAMAR CALLAWAY, B.S., M.D., *Professor of Medicine in Charge of Dermatology and Syphilology.*

M.D., Duke, 1932; B.S., Alabama, 1935; Ass't Instr. in Derm. and Syphil., Univ. of Pa. Med. Sch., 1932-1933; Int. and Ass't Res. in Med., Duke Hosp., 1933-1935; Instr. in Phys. Diag. and Path., Univ. of Alabama, Jan.-July, 1935; Instr. in Derm. and Syphil., Pa. Sch. of Med., 1935-1937; Ass't Field Physician, U. S. Public Health Serv., Feb.-July, 1937; *Associate Physician and Dermatologist, Duke Hospital, 1937—.*

BAYARD CARTER, A.B., B.A., M.A., M.D., *Professor of Obstetrics and Gynecology and Chairman of the Department.*

A.B., Delaware, 1920; B.A. and M.A., Oxford, 1923 and 1924; M.D., Johns Hopkins, 1925; Member Obs. and Gyn. Staff of New Haven Hosp. and Yale Med. Sch., 1925-1929; Assoc. Prof. Obs. and Gyn., and Head of Dept., Univ. of Va. Med. Sch., 1929-1931; *Obstetrician and Gynecologist, Duke Hospital, 1931—.*

FLORENCE M. BURNETT, R.N., B.S., M.A., *Psychosomatic Nursing Consultant, Psychosomatic Service, Adminstrating the In-Service Training Program in Mental Health for Public Health Nurses within the Psychosomatic Clinic of Duke Medical School.*

R.N., Presbyterian Hospital, New York City, 1935; B.S., Public Health Nursing, New York University, 1944; M.A., Mental Hygiene, Teachers College, 1950; General Duty Nurse, Presbyterian Hospital and Meadowbrook Hospital, 1935-36; Private Duty Nurse, 1936-37; Staff Nurse, Henry Street Visiting Nurse Service, 1937-40; Exchange Staff Nurse, to Weld County, Colorado, Maternal and Child Health Clinic and Delivery Service, 1940-41; Assistant Supervisor, Henry Street Visiting Nurse Service, 1941-44; Supervisor, Visiting Nurse Service of New York, 1944-45; U. S. Army Nurse Corps, 1945-48; Teachers College, 1948-50; North Carolina State Health Department, Public Health Nurse Consultant, Mental Hygiene; assigned to *Duke Medical School, Psychosomatic Clinic, 1950—.*

\* Leave of absence, 1951-1952.



WILBURT CORNELL DAVISON, A.B., B.A., B.Sc., M.A., M.D., D.Sc., LL.D., *Dean of the School of Medicine and Professor of Pediatrics.*

A.B., Princeton, 1913; B.A., B.Sc., and M.A., Oxford, 1915, 1916, and 1919; M.D., Johns Hopkins, 1917; D.Sc., Wake Forest, 1932; LL.D., North Carolina, 1944; Int., Radcliffe Infirmary, 1915-1916; Capt., Med. Corps, A.E.F., 1917-1919; Ass't Res., Assoc. Ped., Acting Pediatrician in Charge, Johns Hopkins Hosp., 1919-1927; Instr., Med. Sch., 1919-1927; *Pediatrician, Duke Hospital, 1927—.*

SUSAN COONS DEES, A.B., M.S., M.D., *Assistant Professor of Pediatrics.*

A.B., Goucher, 1930; M.D., Johns Hopkins, 1934; M.S., Minnesota, 1937; Int., Johns Hopkins Hosp., 1934-1935; and Ass't Res. in Med., Strong Mem. Hosp., 1935-1936; Int. in Path., Balto. City Hosps., and Ass't, Johns Hopkins Protein Clinic, 1936-1937; Research Fellow in Ped., Univ. of Minnesota Hosp., 1937-1938; Ass't Disp. Physician, Johns Hopkins Hosp., 1938-1939; *Assistant Pediatrician, Duke Hospital, 1939—.*

WATT WEEMS EAGLE, A.B., M.D., *Professor of Surgery in Charge of Otolaryngology.*

A.B., North Carolina, 1918; Grad. Stud., North Carolina, 1918-1919; M.D., Johns Hopkins, 1925; Int., Church Home and Infirmary, Baltimore, 1925-1926; Int., Ass't Res. and Res. in Laryngol., Johns Hopkins Hosp., 1926-1929; Ass't and Instr. in Laryngol., Johns Hopkins Med. Sch., 1927-1930; *Otolaryngologist, Duke Hospital, 1930—.*

JEWETT GOLDSMITH, A.B., M.D., *Assistant in Neuropsychiatry.*

A.B., The Johns Hopkins University, 1933; M.D., University of Maryland, 1942; Rotating Intern, Kings County Hospital, Brooklyn, N. Y., 1942-1943; Lieut., Medical Corps, U. S. Naval Reserve, 1943-1946; *Veterans Administration Senior Resident in Psychiatry, Duke Hospital, 1946—.*

JEROME SYLVAN HARRIS, A.B., M.D., *Associate Professor of Pediatrics and Biochemistry.*

A.B., Dartmouth, 1929; M.D., Harvard, 1933; Med. House Officer, House of Good Samaritan, Boston, Oct., 1933-Jan., 1934; Int. in Med., Univ. of Chicago Clinics, 1934-1935; Int., Infant's and Children's Hosp., Boston, 1935-1936; Ass't Res. and Assistant Pediatrician, Duke Hosp., 1936-1942; Lt. Col., Med. Corps, U. S. Army, 1942-45; *Assistant Pediatrician, Duke Hospital, 1946—.*

DERYL HART, A.B., A.M., M.D., *Professor of Surgery and Chairman of the Department.*

A.B. and A.M., Emory, 1916 and 1917; M.D., Johns Hopkins, 1921; Int. in Surg., Ass't Res. in Surg. Path., Ass't Res. and Res. in Surg., and Assoc. Surg., Johns Hopkins Hosp., 1921-1930; Ass't in Path., Instr., and Assoc. in Surg., Johns Hopkins Med. Sch., 1922-1930; *Surgeon, Duke Hospital, 1930—.*

LESLIE BENJAMIN HOHMAN, A.B., M.D., *Professor of Neuropsychiatry.*

A.B., Univ. of Missouri, 1912; M.D., Johns Hopkins, 1917; Int., Ass't Res. and Res., Henry Phipps Psychiatric Clinic, Johns Hopkins Hospital, 1917-1922; U. S. Army, 1917-1919; Priv. Practice, 1922-1943; Associate in Psych., Johns Hopkins, 1922-1924; Lecturer in Psych., Univ. of Maryland, 1939-1943; Comdr., Med. Corps, U. S. Navy, 1943-1946; Ass't Prof. of Psych., Johns Hopkins, 1944-1946; *Neuropsychiatrist, Duke Hospital, 1946—.*

HELEN LOUISE KAISER, R.P.T.T., *Instructor in Physical Therapy, in Charge of Division of Physical Therapy.*

R.P.T.T., Harvard, 1921; Ass't Instr., Harvard Med. Sch., Course for Graduates, 1921-1922; Chief Phys. Therap., Detroit Orthop. Clinic, 1922-1925; Cleveland Clinic Found., 1926, and Mt. Sinai Hosp., 1927-1943; *Physical Therapist, Duke Hospital, 1943—.*

ANGUS MCBRYDE, B.S., M.D., *Associate Professor of Pediatrics.*

B.S., Davidson, 1924; M.D., Pennsylvania, 1928; Int. and Res. in Ped., Univ. of Pa. Hosp., 1928-1930; Ass't Res. in Ped., Johns Hopkins Hosp. and Ass't in Ped., Johns Hopkins Med. Sch., 1930-1931; *Assistant Pediatrician, Duke Hospital, 1931—.*

JOSEPH ELDRIDGE MARKEE, B.S., Ph.D., *Professor of Anatomy and Chairman of the Department.*

B.S. and Ph.D., Chicago, 1925 and 1929; Douglas Smith Fellow in Anat., 1929. Instr. in Anat., Chicago, 1929; Research Fell., Gen. Ed. Bd., Carnegie Lab. of Embry., Balto., 1935-1936; Visiting Prof. of Anat., Univ. of Tenn., 1942; Instr., Ass't Prof., Assoc. Prof. and Prof. of Anat., Stanford, 1929-1943; *1943—.*

ELSIE W. MARTIN, A.B., M.S., *Professor of Dietetics.*

A.B., Whitman, 1913; M.S., Teachers Coll., Columbia, 1927; Prof. of Home Economics, Puget Sound, 1915-1917; Dietitian, Univ. of Iowa Hosp., 1919-1920, and Charles T. Miller Hosp., St. Paul, Minn., 1920-1926; Admin. Dietitian, Lakeside Hosp., Cleveland, 1927-1930; *Chief Dietitian, Duke Hospital, 1930—.*

**RUTH CAMPBELL MARTIN, B.A., M.D.,** *Assistant Professor of Surgery in Charge of Anesthesiology.*

B.A., Texas Christian, 1937; M.D., Washington, 1941; Int., Rotat., Deaconess Hosp., St. Louis, Mo., 1941-1942; Ass't Res., Res. and Instr. in the Dept. of Anes., Billings Hosp., 1942-1944; *Anesthetist, Duke Hospital, 1944—.*

**MARTHA ELIZABETH MATTHEWS, A.B., O.T.R.,** *Director of Occupational Therapy.*

A.B., Winthrop College, 1933; O.T.R., Richmond Professional Institute of William and Mary, 1947; *Director of Occupational Therapy, Duke Hospital, 1947—.*

**ELIJAH EUGENE MENEFFEE, JR., B.S., M.D.,** *Assistant Professor of Medicine.*

B.S. and M.D., Duke, 1936; Int., N. Y. State Sanatorium, Raybrook, July 1-Aug. 31, 1936; Int. in Med., Duke Hosp., 1936-1937; Research Fellow in Med. and Bact., Duke Med. Sch., 1937-1938; Ass't Cardiology, Mass. Gen. Hosp., 1938-1939; Res. in Tbc., Bellevue Hosp., New York City, Jan. 1-Dec. 31, 1939; *Assistant Physician, Duke Hospital, 1940—.*

**EDWARD STEWART ORGAIN, M.D.,** *Associate Professor of Medicine.*

M.D., Virginia, 1930; Int., Ass't Res. and Res. in Med., Univ. Hosp., Cleveland, 1930-1933; Res. Fellow in Med., assigned to Cardiology, Mass. Gen'l Hosp., 1933-1934; *Assistant Physician, Duke Hospital, 1934—.*

**WALTER SCOTT PERSONS, A.B.,** *Instructor in Physical Education.*

**KENNETH LEROY PICKRELL, M.D.,** *Associate Professor of Surgery.*

M.D., Johns Hopkins, 1935; Int., Ass't Res. and Res. in Surg., Johns Hopkins Hosp., 1935-1944; *Assistant Surgeon, Duke Hospital, 1944—.*

**HILDA PERSONS POPE, A.B., M.A., Ph.D.,** *Instructor in Bacteriology.*

A.B., Georgia State College for Women, 1944; M.A. and Ph.D., Duke University, 1946 and 1949; *Instructor and Assistant Bacteriologist, Duke Hospital, 1948—.*

**CHARLES HENRY SAWYER, A.B., Ph.D.,** *Associate Professor of Anatomy.*

A.B., Middlebury, 1937; Ph.D., Yale, 1941; Ass't in Biol., Middlebury, 1936-1937; Ass't in Zool., Yale, 1938-1941; Instr. in Anat., Stanford, 1941-1943; Visiting Ass't Prof. of Zool., Yale, 1946 (summer); 1944—.

**MARY CLYDE SINGLETON, B.S., R.P.T.T.,** *Assistant in Physical Therapy.*

B.S., Woman's College, University of North Carolina, Greensboro, N. C., 1932; R.P.T.T., Washington School of Physical Education, Washington, D. C., 1934; Assistant in Physical Therapy, Watts Hospital, Durham, N. C., 1934-35; Assistant in Physical Therapy, Veterans Administration, Walla Walla, Washington, 1935-36; *Clinical Supervisor, Physical Therapy Department, Duke Hospital, 1940—.*

**EUGENE ANSON STEAD, JR., B.S., M.D.,** *Florence McAlister Professor of Medicine and Chairman of the Department.*

B.S. and M.D., Emory Univ., 1928 and 1932; Int. Med., Peter Bent Brigham Hosp., 1932-1933; Research Fellow in Med., Harvard, 1933-1934; Int. Surg., Peter Bent Brigham Hosp., 1934-1935; Ass't Res. in Med., Cincinnati Gen'l Hosp., 1935-1936; Res. in Med., Cincinnati Gen'l Hosp., 1936-1937; Instr. in Med., Univ. of Cincinnati, 1935-1937; Res. Phys., Thorndike Memorial Laboratory; Ass't in Med., Harvard and Boston City Hosp., 1937-1939; Associate in Med., Peter Bent Brigham Hosp., 1939-1942; Instr. in Med., Harvard, 1939-1941; Assoc. in Med., Harvard, 1941-1942; Act. Phys.-in-Chief, Peter Bent Brigham Hosp., 1942; Prof. of Med. and Phys.-in-Chief, Emory Div. of Grady Hosp., 1942-1946; Dean, Emory Univ. Sch. of Med., 1945-1946; *Physician, Duke Hospital, 1947—.*

**HAYWOOD MAURICE TAYLOR, B.S., M.S., Ph.D.,** *Associate Professor of Biochemistry and Toxicology.*

B.S., M.S. and Ph.D., North Carolina, 1920, 1921, and 1924; Instr. in Chem. and Pharmaceut. Chem., North Carolina, 1920-1925; Research Chemist, E. R. Squibb & Sons, and Fisk Rubber Co., 1925-1928; Instr. in Ophthalmol., and Chemist to Wilmer Institute, Johns Hopkins Hosp., 1928-1930; Visiting Fellow in Forensic Med., New York Univ., 1934; *Associate Biochemist and Toxicologist, Duke Hospital, 1930—.*

**ELISABETH STELLE YEARICK, B.S., M.S.,** *Therapeutic Dietitian.*

B.S. and M.S., University of Wisconsin, 1935; Intern in Dietetics, University of Michigan Hospital; Dietitian, State Welfare Home, Smyrna, Del.; Bridgeport Hospital, Bridgeport, Conn.; Mount Park Hospital, St. Petersburg, Fla.; *Therapeutic Dietitian, Duke Hospital, 1946—.*

## Other Services



### *Hospital Health Service*

EVELYN SMITH JERNIGAN, R.N., B.S., *Health Service Nurse.*

Diploma, The Medical College of Va. School of Nursing, Richmond, Va., 1945; B.S. in Nursing, Medical College of Va., 1948; Head Nurse, Medical College of Va., 1946; Staff Nurse, Duke Hospital, 1947; Assistant Head Nurse, Duke Hospital, 1947-48; Head Nurse, Duke Hospital, 1949; *Health Service Nurse, Duke Hospital, 1950—.*

JANE W. TRUSCOTT, R.N., B.S., M.N., *Student Health Service Nurse.*

Diploma, Sullins College, 1943; B.S., Fla. State University, 1945; M.N., Yale Univ. School of Nursing, 1948; Surgical Staff Nurse, New Haven Hospital, New Haven, Conn., August 1948-December 1948; New Haven Visiting Nurse Assoc., January 1949-June 1950; *Student Health Service Nurse, Duke Hospital, 1950—.*

### *Residences*

HELEN W. ABBOTT, R.N., *Director of Nurses' Residences.*

Diploma, Johns Hopkins School of Nursing, 1914; Private duty, Baltimore, Md., 1914-15; Operating Room and Pediatric Supervisor, Bellevue Allied Hospitals, 1915-16; Nursing Arts Instructor, Augusta University Hospital, 1917; Supervisor of Nurses' Quarters, Fort Meade, Md., 1918; Practical Nursing Instructor, Army School of Nursing, Fort Meade, Md., 1919; *Director of Nurses' Residences, Duke Hospital, 1930—.*

### *Assistant Residence Directors*

AMANDA MORRIS, Baker House.

MITTIE P. HOLIFIELD, Baker House.

RUTH WALTERS, 2204 Erwin Road.

LORA JACKSON WHITFIELD, 2204 Erwin Road.

CLAUDIA BEASLEY, Baker House and 224 Erwin Road.

ANNIE WOMBLE, 2204 Erwin Road.

MARIE PRICE, Baker House.

### *Practical Nursing Division—Duke Hospital*

SARA C. PREVATT, R.N., B.S., *Director.*

Woman's College, University of North Carolina, Greensboro, N. C., 1943-45; Diploma in Nursing, Duke University School of Nursing, 1948; B.S. in Nursing, Duke University, 1948; General Duty in Pediatrics, James Walker Memorial Hospital, Wilmington, N. C., 1948-49; Night Nurse, Emergency Room, Duke Hospital, September, 1949-May, 1950; *Assistant Supervisor, Night Nursing Service, May, 1950—.*

ETHEL SHOSTERMAN BOTWIN, R.N., *Assistant Director.*

Diploma, Beth Israel Hospital School of Nursing, Boston, Mass., 1946; General Duty, Private Ward, 1946; Head Nurse, Pediatrics, Beth Israel Hosp., 1947-49; Burdett College, Lynn, Mass., 1949; *Assistant Director, School of Practical Nursing, Duke Hospital, 1949—.*

# Nursing Staff of Duke Hospital



FLORENCE K. WILSON, A.B., R.N., M.A.

*Dean of the School of Nursing*

Faculty Apartments

LELIA CLARK, R.N., B.S., M.A.

Baker House

*Assistant Professor of Nursing Education, Director of Nursing Service*

## *Supervisors*

REBECCA LORENA ALDERMAN, R.N., *Assistant Supervisor, Night Nursing Service.*

Madison College, Harrisonburg, Va., 1943-44; Diploma, Duke University School of Nursing, 1948; General Staff, Duke University Hospital, 1949; *Assistant Supervisor, Night Nursing Service, Duke Hospital, 1950—.*

JEAN HOER BAIRD, *Assistant Supervisor, Night Nursing Service.*

B.S. in Nursing, University of Cincinnati, 1949; Staff Nurse, Cincinnati Gen., 1950; *Assistant Night Supervisor, Duke Hospital, 1951—.*

MARION FRANCES BATCHELDER, R.N., *Supervisor of the Operating Room.*

Diploma, Peter Bent Brigham Hospital School of Nursing, Boston, Mass., 1920; Head Nurse, 1921-23; Supervisor of Operating Room, Peter Bent Brigham Hospital, 1923-27; Head Nurse, Operating Room, Johns Hopkins Hospital, 1927-1930; *Supervisor of the Operating Room, 1930—.*

ETHEL MARIE BENSON, *Supervisor, Premature Nursery.*

Diploma, Hamlet Hospital School of Nursing, 1946; Post-graduate course in Pediatric Nursing, Children's Hospital, University of Cincinnati, 1948; Head Nurse in Newborn Nursery, Hamlet Hospital, 1947; Supervisor of Pediatric Nursing, Hamlet Hospital, 1949; *Supervisor, Premature Nursery, Duke Hospital, 1951—.*

JEANETTE E. BRYANT, R.N., B.S., *Instructor in Surgical Nursing.*

Diploma, Westbrook Jr. College, Portland, Maine, 1941; Diploma, Peter Bent Brigham Hospital School of Nursing, Boston, Mass., 1945; B.S. in Nursing Education, Duke University, 1949; *Instructor in Surgical Nursing, Duke Hospital, 1949—.*

IVA O. CAIN, R.N., *Evening Supervisor.*

Memorial Hospital School of Nursing, Cumberland, Md., 1935; Private Duty, Cumberland, Md., 1936; Staff Nurse, Sheppard-Enoch Pratt Hospital, 1937-1938; Head Nurse, Sheppard-Enoch Pratt Hospital, 1939-1941; Ass't Night Supervisor, Sheppard-Enoch Pratt Hospital, 1941-1942; Administrative Supervisor, Sheppard-Enoch Pratt Hospital, 1943-1945; Staff Nurse, Duke Hospital, 1947-1950; *Evening Supervisor, Duke Hospital, 1950—.*

KYLE CARSON, R.N., A.B., *Instructor in Medical Nursing.*

Flora Macdonald College, Red Springs, N. C., 1927-31; Diploma in Nursing, Chesapeake and Ohio School of Nursing, Clifton Forge, Va., 1945; Post-graduate, Boston University, Boston, Mass., 1945; Science Instructor, Chesapeake and Ohio School of Nursing, 1945-48; Educational Director, Chesapeake and Ohio School of Nursing, 1948; *Instructor in Medical Nursing, Duke Hospital, 1949—.*

GERTRUDE HERMIE ELLIOTT, R.N., *Supervisor in Obstetric Nursing.*

Diploma, Mission Hospital, Asheville, N. C., 1943; Head Nurse on Obstetrical Service, Mission Hospital, Sept. to Dec. 1943; Supervisor of Obstetrical Service, Mission Hospital, 1943-46; Post-graduate student, Margaret Hague Maternity Hospital, Jersey City, N. J., 1946 (6 months); Supervisor of Obstetrical Service, Mission Hospital, 1946-47; *Instructor in Obstetric Nursing, Duke Hospital, 1948—.*

RUTH S. EMLET, A.B., B.S., R.N., *Assistant Supervisor of the Operating Room.*

A.B., Greensboro College, 1941; B.S., R.N., Duke University School of Nursing, 1944; Staff Nurse, Operating Room, Duke Hospital, April 1944-Sept. 1944; Head Nurse, Sept. 1944-April 1945; Operating Room, Presbyterian Hospital, N. Y., April 1945-August 1945; Head Nurse, Operating Room, Duke Hospital, Sept. 1945-July 1947 and July 1948-April 1950; *Assistant Supervisor of the Operating Room, Duke Hospital, 1950—.*

JULIA FLEMING, R.N., B.S., *Supervisor, Psychiatric Nursing.*



MARGARET E. MITCHELL, R.N., B.S., *Assistant Director of Nursing Service.*

Diploma, South Highlands Infirmary School of Nursing, Birmingham, Alabama, 1936; Supervisor, South Highlands Infirmary, Birmingham, Alabama, 1937-42; U. S. Navy Nurse Corps, 1942-45; University of Southern California, Summer 1946; Katharine Gibbs School, Boston, Mass., 1946-47; B.S., Woman's College, Duke University, 1948-50; *Assistant Director of Nursing Service, 1950—.*

ELSIE GERTRUDE MOSS, R.N., *Night Supervisor.*

Diploma, Philadelphia General Hospital, Philadelphia, Pa., 1935; Staff Nurse, Duke Hospital, 1935-41; Second Assistant to the Night Supervisor, 1941-42; First Assistant to the Night Supervisor, 1942-44; Private Floor Supervisor, 1944-45; First Assistant to the Dean, 1945-46; Director of the School of Nursing, Carolina General Hospital, Wilson, N. C., October, 1946-May, 1947; *Night Supervisor, Duke Hospital, July, 1947—.*

LILLIE S. POPE, R.N., *Supervisor, Nursing Service.*

Watts Hospital School of Nursing, Durham, N. C., 1929; Army Nurse Corps, 1929-1950; *Evening Supervisor, Duke Hospital, 1950—.*

MILDRED M. SHERWOOD, R.N., *Supervisor of Pediatric Nursing Service.*

Diploma, Mount Sinai Hospital, New York City, 1923; Head Nurse, Mount Sinai Hospital, 1923-26; Head Nurse, Johns Hopkins Hospital, 1926-30; *Supervisor of Pediatric Nursing Service, 1930—.*

JULIA B. SUITT, *Supervisor, Out-Patient Clinic.*

North Carolina College for Women, Greensboro, N. C., 1919-1920; Diploma, Duke University School of Nursing, 1934; Assistant Head Nurse, Medical Ward, 1934-36; Head Nurse, Private Surgical Ward, 1936-43; *Supervisor, Out-Patient Clinic, 1943—.*

## *Head Nurses*

AGNER, MARTHA, Protestant Episcopal Hospital School of Nursing.  
*Head Nurse in Delivery Room.*

BARNHART, BETTY, Duke University School of Nursing.  
*Head Nurse on Psychiatric Ward.*

CLEGG, EIZABETH, Duke University School of Nursing.  
*Head Nurse on Colored Medical and Surgical Ward.*

DAVIS, PAULINE, B.S., Duke University School of Nursing.  
*Head Nurse on Woman's Surgical and Gynecological Ward.*

DIFFENBACH, ANNE, Medical College of South Carolina.  
*Head Nurse in Operating Room.*

FAWCETT, BARBARA ALLEN, The Johns Hopkins School of Nursing.  
*Head Nurse on Men's Medical Ward.*

GAMBILL, FRANCES E., Davis Hospital School of Nursing.  
*Head Nurse on Women's Surgical Ward.*

HALTIWAGNER, OMA, Emory University School of Nursing.  
*Head Nurse on Women's Medical Ward.*

KNOWLES, LOIS, Duke University School of Nursing.  
*Head Nurse on Private Surgical Ward.*

KOZINSKI, JOHNSIE, Duke University School of Nursing.  
*Head Nurse in Operating Room.*

LOCKMAN, MARY, Duke University School of Nursing.  
*Head Nurse on Private Medical Ward.*

LUTHIR, DOROTHY, Duke University School of Nursing.  
*Head Nurse in Operating Room.*

MASON, LILLIAN, Watts Hospital School of Nursing.  
*Head Nurse on Colored Obstetrical and Gynecological Ward.*

MELTON, VELMA, Medical College of South Carolina.  
*Head Nurse on Men's Surgical Ward.*



- MELVIN, MARGARET, Nashville General Hospital.  
*Head Nurse on Gynecological Ward.*
- MULLER, DOROTHY, Duke University School of Nursing.  
*Head Nurse on Obstetrical Ward.*
- NALLEY, MAYBELLE, General Hospital.  
*Head Nurse on Private Medical Ward.*
- PETREA, MARGARET, A.B., B.S., Duke University School of Nursing  
*Head Nurse on Men's Surgical Ward.*
- PUTMAN, ELIZABETH, The Johns Hopkins School of Nursing.  
*Head Nurse in Recovery Room.*
- STEELE, MARY LEE, Duke University School of Nursing.  
*Head Nurse on Pediatric Ward.*
- TAYLOR, NANCY, Charlotte Sanatorium School of Nursing.  
*Head Nurse on Private Surgical Ward.*
- TORRENCE, ELEANORA, Knoxville General Hospital School of Nursing.  
*Head Nurse on Surgical Pediatric Ward.*
- WELLMAN, LORENE, Grace Hospital School of Nursing.  
*Head Nurse in Premature Nursery.*

### *Administrative Nurses in Out-Patient Department*

- ATKINS, LILLIAN, Mary Elizabeth Hospital School of Nursing.  
*Administrative Nurse in Dispensary (Dept. of Gynecology).*
- CAMPBELL, LOUEY, St. Bartholomews Hospital.  
*Administrative Nurse in Dispensary (P.R.N.).*
- COBB, MARY BERNICE, B.S., Duke University School of Nursing.  
*Administrative Nurse in Dispensary (Urology Clinic).*
- FERGUSON, HAZEL MCCOY, Duke University School of Nursing.  
*Administrative Nurse in Dispensary (Orthopaedic Clinic).*
- GUTIERREZ, NAN, Watts Hospital School of Nursing.  
*Administrative Nurse in Dispensary (Bronchoscopic Clinic).*
- KALEEL, ADELE, De Paul School of Nursing.  
*Administrative Nurse in Dispensary (Pediatric Clinic).*
- MARKS, LOUISE, Johnston-Willis Hospital School of Nursing.  
*Administrative Nurse in Dispensary (White Medical Clinic).*
- NIBLOCK, JAMIE, Guilford General Hospital School of Nursing.  
*Administrative Nurse in Dispensary (Dept. of Obstetrics & Gynecology).*
- PERRY, SARAH, Statesville Training School for Nurses.  
*Administrative Nurse in Dispensary (Colored Medical Clinic).*
- REESE, EVA, Watts Hospital School of Nursing.  
*Administrative Nurse in Ophthalmology Division.*
- SCOTT, MARTHA, Shelby Hospital School of Nursing.  
*Administrative Nurse in Dispensary (Surgical Clinic).*

### *Assistant Head Nurses and General Staff Nurses*

- ANDERSON, CAROL, Duke University School of Nursing.
- ANDERSON, MARY, Duke University School of Nursing.
- BLAND, MYRA, Duke University School of Nursing.
- BLOODWORTH, LILLIAN, Watts Hospital School of Nursing.

BOONE, EDITH, Rocky Mount Sanitarium.  
BOYD, PATRICIA, School of Nursing, Royal Victoria Hospital.  
BRAY, DOROTHY, Duke University School of Nursing.  
BRAY, IDA, Duke University School of Nursing.  
BURCHETTE, Yale University School of Nursing.  
BYATT, PATRICIA, Russell Sage School of Nursing.  
COPESTON, PATRICIA, Catholic University School of Nursing.  
CORNWELL, POLLY, Duke University School of Nursing.  
COURTENAY, BEATRICE, Columbia Hospital School of Nursing.  
CROOM, BOBBIE, Duke University School of Nursing.  
CROSBY, NANCY, Sommerset Hospital School of Nursing.  
DEPEW, ELLEN, Cambridge Maryland School of Nursing.  
DUBLIN, VELMA, Good Samaritan Hospital School of Nursing.  
ELLIOT, EULA, School of Nursing, Royal Victoria Hospital.  
FARRAR, HELEN, Duke University School of Nursing.  
FAULKNER, KATE, Charlotte Samaritan School of Nursing.  
FERGUSON, HAZEL, Duke University School of Nursing.  
GARLAND, ZETA, Duke University School of Nursing.  
GATLIN, JEAN, Duke University School of Nursing.  
GILCHRIST, ANNIE, McLeod Infirmary.  
GRAVES, PEARL, St. Barnabus Hospital.  
GRIFFIN, ETHEL, Duke University School of Nursing.  
HAMLIN, NANCY, Duke University School of Nursing.  
HAMM, WANDA, Duke University School of Nursing.  
HICKMAN, ALICE, Duke University School of Nursing.  
HOWARD, MAROLYN, Duke University School of Nursing.  
HUGHES, ISABEL, School of Nursing, Royal Victoria Hospital.  
HULTIN, VIRGINIA, Massachusetts General Hospital.  
INGRAM, THELMA, Good Samaritan Hospital.  
JACOKES, RUTH, Duke University School of Nursing.  
JOYNER, JULIA, Good Samaritan Hospital.  
KICK, MAXINE, University of Virginia Hospital.  
KENNEY, DORIS, Duke University School of Nursing.  
KNIGHT, MARY, Duke University School of Nursing.  
KRUSE, MARY, Delaware Hospital.  
KULPAN, BETSY, Duke University School of Nursing.  
KYLE, HELENA, Lexington Hospital.  
LEWIS, JANE, Duke University School of Nursing.  
McCULLIN, ETHEL, Lincoln Hospital.  
McJUNKIN, PEARLENE, General Hospital.  
McLEAN, IRENE, St. Pauls Hospital School of Nursing.  
MALONE, RUTH, Lincoln Richardson Memorial Hospital.  
MASON, MARY JANE, Duke University School of Nursing.  
MEAD, MARGARET, Duke University School of Nursing.  
MILLER, JACQUELINE, Presbyterian School of Nursing.  
MILLER, MARGARET, University of Pennsylvania.  
NEW, ELLEN, Anderson Memorial Hospital.  
NIFONG, DORIS, Mercy Hospital.  
PACE, ELAINE, Baptist Hospital.  
PARRISH, MABEL, L. Richardson Memorial Hospital.  
PATTON, ARLENE, University of Pennsylvania.  
PEGNUM, CALVINE, Medical College of Virginia.  
PERKINS, MARY FAYE, Duke University School of Nursing.  
PERKINS, NELL ROSE, Duke University School of Nursing.  
PETERS, ROSE MARY, Andrew Memorial Hospital.  
PLYLER, HELEN, Duke University School of Nursing.  
PURKALL, MAUDE, Duke University School of Nursing.  
REECE, MARGARET, St. Leo's Hospital.  
RILEY, ONZELLE, St. Leo's Hospital.  
SCHNOOR, LENA, Duke University School of Nursing.  
SEARS, LAURA, Duke University School of Nursing.

SENKBEIL, DORIS, Anderson Memorial Hospital.  
SHELTON, LILLIAN, Martin Memorial Hospital.  
SKIRVIN, CORINNE, Alachua General Hospital.  
SMALL, MARY, University of Tennessee.  
SNYDER, CARRIE MAY, Grace Hospital.  
TABER, SHIRLEY, University of Pennsylvania.  
TATUM, VAN DELL, Piedmont Hospital.  
THOMAS, CORRINA, Duke University School of Nursing.  
THOMAS, LOUISE, University of Virginia.  
THOMPSON, WINIFRED, Duke University School of Nursing.  
TUCKER, BETTY, Duke University School of Nursing.  
TULLY, ARDENIA, not listed.  
TURBERVILLE, MARIE, Duke University School of Nursing.  
TURNER, JEWEL, Mercy School of Nursing.  
VAIL, ELEANOR, Duke University School of Nursing.  
WALLACE, BERNICE, Anderson Memorial School of Nursing.  
WELSH, DEBORAH, Duke University School of Nursing.  
WHITAKER, MYRTLE, Brantwood Hospital.  
WINDLE, LOIS, Providence Hospital.  
WRIGHT, BARBARA, Methodist Hospital School of Nursing.

# The School of Nursing



## *Opportunities in Nursing*

HEALTH services to the people of the United States are being expanded at a very rapid rate. Most of the states are at present engaged in studying the need for hospitals and making plans to meet these needs. Departments of Health are making surveys as to the adequacy of their programs and how these programs may be integrated with the programs of hospitals to meet the needs of the population for medical care. These expanding activities call for more personnel with professional preparation.

The professional nurse must recognize physical symptoms of illness which are commonly identified with organic changes. She must also recognize those heretofore less considered manifestations of illness such as anxieties, conflicts, and frustrations, which have a direct influence on organic changes and are now thought to be the result of an incompatible interaction between a person and his environment.

Nurses in their longer contacts with individuals have more opportunities to observe behavior and to listen to expression of thought under varying conditions than do physicians whose contacts are necessarily intermittent and brief. For this reason the nurse must be able to direct her actions and her verbal expressions on the basis of a sound understanding of human behavior and human relationships. She must be able to assess the health needs of the family and community as well as the individual.

The first preparation needed for meeting the requirements in the field of nursing is secured in a school of nursing. For well qualified candidates this school should be a collegiate school offering a program which will give a good basic understanding of the principle and practices of the art of nursing. After graduation from the school of nursing the student may wish preparation needed for the work of a head nurse, supervisor or other administrative position in a hospital or public health organization.

To give the applicant for admission to a school of nursing information as to the admission requirements, programs, fees and living arrangements for preparation in nursing, we offer this bulletin describing the following programs.

1. Programs for basic preparation in professional nursing at the Duke University School of Nursing leading to a diploma in

nursing and admission with advanced standing to a degree program. (Pages 18-25.)

2. Programs for preparing head nurses, supervisors and administrators for schools of nursing and nursing services in hospitals and other health organizations as planned in the Division of Nursing Education, Duke University, Durham, N. C. (Pages 26-39.)
3. Programs for preparing nurses for public health nursing as planned by the School of Public Health, University of North Carolina, Chapel Hill, N. C. (Pages 40-42.)

### *General Information*

The School of Nursing of Duke University was established in 1931 in association with the School of Medicine of the University and Duke Hospital through the gift of the late James B. Duke. The administrator of the School of Nursing is a member of the Executive Committee of the Medical School, Nursing School and Duke Hospital which promotes the common interests of the three organizations.

The central aim of the educational program is to select young women with aptitudes, interests and personal characteristics needed in nursing, and to provide an educational program enabling them to develop skills, knowledge and attitudes needed for professional nursing service in the community and for maximum personal development.

This program is designed to prepare nurses for:

1. General duty in hospitals.
2. Private duty in hospitals and homes.
3. First level positions under supervision in public health nursing agencies.

### *Facilities for Instruction*

The facilities for instruction include the facilities for instruction available in the undergraduate, professional and graduate schools and colleges of Duke University and the clinical facilities of Duke Hospital.

### *Clinical Facilities*

Duke Hospital has every modern convenience for the diagnosis, proper nursing care, welfare and comfort of the patients including 604 hospital beds, a large public out-patient department, a large private diagnostic clinic and offices and examining rooms for the doctors who serve on the staff of the hospital. There are very close relationships



established between the hospital and the Health Departments in North Carolina. A system for referral of patients to the nursing service of the Health Departments has been established between the supervisors of the nursing service in the hospital and the nursing service of the Health Department.

The beds in Duke Hospital are assigned to the various services as follows: Medicine, including dermatology and neurology, has 75 ward beds; surgery, including urology, otolaryngology, ophthalmology, and orthopaedics, 148 ward beds; obstetrics, including gynecology, 56, and 50 bassinets; neuropsychiatry, 27; and pediatrics, 40. There are 222 private and semi-private rooms, 7 air-conditioned operating rooms, and 4 obstetric delivery rooms. Except for emergencies, all patients are admitted to the hospital from either the out-patient clinic or the private diagnostic clinic.

The hospital has been approved for internships and residencies by the Council on Medical Education and Hospitals of the American Medical Association.

The out-patient department has an average of 353 visits per day. All services including psychiatry carry on an active program in the out-patient departments. Students are assigned to the out-patient department for at least four weeks during their program in the School of Nursing. The first assignment is in the first year, to give the student some knowledge of the background of her patients; subsequent assignments are made concurrent with the experience on each service.

### *Libraries*

The reference library of 2,298 books and periodicals of special interest to students majoring in nursing is located in Baker House. Students may use the general libraries on the East and West Campuses and the Duke Hospital Library. A collection of visual aids including films is being assembled with an index in the library for the use of students and instructors in the School of Nursing.

### *Application for Admission*

Applications for admission to the School of Nursing should be made to the Committee on Admissions of the School of Nursing, Box 3714 Duke Hospital, Durham, N. C. Application forms will be sent on request.

### *Admission*

Since the profession of nursing requires women with a high sense of integrity and responsibility, with culture and intelligence whose predominant interest is service, the Admissions Committee will select

the applicants who, in its opinion, seem best qualified for nursing. The Admissions Committee must have on file the records indicating the fulfillment of the following requirements before considering an applicant.

1. Graduation from high school with sixteen units of credit as indicated.
2. One year of college with the semester hours of credit as indicated.
3. Aptitude and achievement tests.
4. Three recommendations.
5. Interviews.
6. Physical and dental examination.

### *Specific Requirements*

1. An applicant for admission to the School of Nursing must present at least sixteen acceptable units of secondary school credit. A unit of credit is allowed for a course of study pursued throughout an academic year at an accredited secondary school, if the course has been completed satisfactorily.

1. Twelve units must be in English, foreign language, history and social studies, mathematics, and natural science; and must include:
  - (a) English—3 units.
  - (b) Algebra—1 unit.
  - (c) Plane geometry—1 unit.
2. Four units may be in the subjects listed above or from those in the following table. The units indicate the maximum amount of credit acceptable in each subject:

<i>Subject</i>	<i>Units</i>	<i>Subject</i>	<i>Units</i>
Agriculture .....	2	Mechanical Drawing .....	2
Art .....	1	Music .....	1
Commercial Subjects .....	3	Physical Geography .....	1
Economics .....	1	Sociology .....	1
Household Economics .....	2	Woodworking, Machine Work .....	2

Other units offered in subjects not included in this list will be considered for acceptance on the basis of full statements transmitted with the applicant's record from the school recommending her.

If students make satisfactory scores on a scholastic aptitude test, the above requirements will not be rigidly adhered to by the School of Nursing.

II. One year of college work is required for admission to the Duke University School of Nursing. This work may be taken at any accredited college or university and should include the following courses:

	S.H.
English .....	6
Chemistry .....	8
Zoology or Biology .....	4
History, Economics or Political Science .....	6
Electives (Foreign Language, Literature, Mathematics, Religion, History, Appreciation of Art or Music and Physical Education) .....	8

Students who wish to complete requirements for the degree of Bachelor of Arts after graduation from the School of Nursing should take six credits of foreign language during the freshman year. Those who submit two or more units of one language in high school are advised to continue with that language in college. If the college will not allow two sciences in the first year, chemistry is preferred.

III. Satisfactory scores on a battery of aptitude and achievement tests.

IV. Three recommendations, two of which must come from recent high school or college instructors.

V. Interviews with two members of the Duke University School of Nursing faculty, whenever possible.

VI. Records of recent physical and dental examination.

A physical examination at Duke Hospital is required for final acceptance into the School of Nursing. This examination includes a chest x-ray and a tuberculin test.

Students who attend college more than one year before entering the School of Nursing are advised to take the following courses:

	S.H.
Literature .....	6
Psychology .....	3-6
Sociology .....	3-6
Religion, Ethics or Philosophy .....	6
Language (second year of same language taken in first year) .....	6
Electives (Physical Education) .....	2-8

## *Fees and Expenses*

	<i>First Year</i>	<i>Second Year</i>	<i>Third Year</i>
Tuition .....	\$100.00	\$100.00	\$100.00
Books (Estimated) .....	40.00	10.00	10.00
Pre-entrance tests .....	5.00		
Activities .....	15.00	15.00	15.00
Graduation .....			3.00
Diploma .....			5.00
Degree .....			5.00
Cap and Gown Rental .....			1.25
Room Key Deposit .....	1.00		
Uniforms .....	84.20		
	<hr/>	<hr/>	<hr/>
	\$245.20	\$125.00	\$139.25

The fee for pre-entrance tests and health examination is payable at time testing is done. Checks should be made payable to Duke University.

No student is permitted to attend classes until she has complied with all regulations concerning registration and payment of bills for the term.

Arrangements for purchase of uniforms are made with the uniform company late in September. At that time, \$68.70 of the cost of the uniforms is paid.

A fee for public health nursing will be added in the senior year when arrangements for the experience are completed.

Duke Hospital provides board, room and laundry for students in the School of Nursing. The rooms in the residence are fully equipped. Twenty-five dollars of the tuition fee is payable upon receipt of the acceptance letter, the balance is due upon admission.

Fees for courses which require registration in the Woman's College are charged upon the basis of hours of credit.

### *Loan Fund*

Through the generosity of the Kellogg Foundation, loan funds sufficient to cover tuition costs are available to students who demonstrate a real need and who are qualified. There are also a limited number of tuition scholarships for exceptionally qualified students.

Residents of North Carolina and others upon recommendation may secure loans from the Medical Care Commission of North Carolina. The conditions under which these loans are granted will be supplied upon inquiry addressed to the Dean of the School of Nursing.

### *Residences*

Students are housed in the fireproof residences located near the hospital. Rooms are adequately equipped with blankets and linen, making further provision by the student unnecessary. Life in the dormitories is under the regulations established by the Student Government Association with advice from the faculty.

### *Health Regulations and Physical Education*

The School has general supervision of the student's health. All physical defects, such as defective vision, dental needs, etc., must be corrected before admission to the School. The student must have been immunized against typhoid fever and vaccinated against smallpox during the current year. All students are required to pass a physical

examination before admission to the School of Nursing and at intervals thereafter, a final examination being given at the end of the course. Students whose condition needs further observation may be admitted tentatively, but must cancel their application if later findings prove them physically unfit for nursing. Students about whom it is decided that tonsillectomy or other surgery was indicated before admission to the School, or students under care of a private physician for some minor complaint which does not interfere with the practice of nursing but requires hospitalization and surgery, may be asked to pay for this care by the Hospital.

Students are allowed three weeks' sick leave during the three-year course.

### *Activities Offered*

Swimming, basketball and softball are offered as student activities, in addition to social activities. First-year students are required to elect either swimming or basketball.

### *Readmission*

Students who are absent for more than one month on account of illness or have leave of absence may be readmitted to the same or a succeeding class at the discretion of the faculty.

### *Leave of Absence*

Students are not expected to leave the School because of family or other personal reasons. Absence from the School is granted only in extreme cases. If a student is obliged to be away for a period exceeding four weeks, the Dean of the School of Nursing will determine the date of her return and the question of resuming her place in her original class.

### *Dismissal*

The faculty of the School of Nursing may, at any time, place a student on probation or release her from the School if, in its opinion, she does not have the qualifications necessary for the profession.

## *The Duke University School of Nursing Alumnae Association*

The Duke University School of Nursing Alumnae Association was formed for the purpose of rendering mutual help and improvement in professional work, and for the promotion of good fellowship among the graduates of the School.



The Alumnae Association co-operates with the North Carolina State Nurses' Association and the American Nurses' Association in working for the professional and educational advancement of nursing.

*Alumnae Notes*, a quarterly news publication, furnishes items of interest to the members of the Association.

### *Santa Filomena*

Santa Filomena, Senior Honorary of the Duke University School of Nursing, was organized in April, 1944, under the sponsorship of the 1943 class. The purpose of this organization is to recognize achievement and promote leadership.

The members are chosen from the rising Senior Class and are publicly tapped by the old members at the first meeting of the SGA in their senior year, the number chosen not exceeding nine or being less than five. Each candidate must show recognized qualities of leadership or must have made some contribution toward the betterment of the School of Nursing. She must have demonstrated superior nursing abilities and her scholastic record must be eighty or above throughout her first two years.

Santa Filomena strives for better interclass relations, and to promote better nursing and higher nursing standards. The specific objectives are chosen by the members each year. All proceedings of the meetings of this organization are held in secrecy as are all ceremonies except the public tapping of the new members. The Santa Filomena's flower is the white lily and the members wear a small gold Florence Nightingale lamp.

# Awards to Nurses



## BAGBY AWARD IN PEDIATRICS

The Bagby Award in Pediatrics (a subscription to the *American Journal of Nursing*) is given at graduation to the best Duke student nurse in pediatrics.

## THE FLORENCE NIGHTINGALE PLAQUE

The Florence Nightingale plaque is awarded to a graduating student by the Alumnae Association for leadership, scholarship and nursing skill.

## THE MOSELEY AWARD

The Moseley Award of \$25.00 is given to the student in the senior class who has shown the most skill in Nursing Arts throughout her program in the School of Nursing.

# Program of the School of Nursing



THE program of the School of Nursing covers a period of three calendar years with one month of vacation each year. At the completion of this program, the student receives the diploma in nursing and is then eligible for the examinations given by the North Carolina State Board of Nurse Examiners. The School is fully approved by the North Carolina Joint Committee on Standardization.

## *Combined Academic-Professional Programs in Nursing*

Students who have been graduated from the Duke University School of Nursing with an average grade of "C" or better may, upon recommendation by the Dean of the School of Nursing, apply for admission to the Woman's College of Duke University. If accepted she may obtain the degree of Bachelor of Arts or Bachelor of Science from Duke University by fulfilling the requirements for the degree of choice. Forty semester hours of credit toward these degrees are given for the three-year nursing program or toward the degree of Bachelor of Science in Nursing Education for those showing ability in teaching. See page 31.

The program of studies leading to the degree of Bachelor of Arts is as follows:

1. Minimum requirement of the Undergraduate College of Arts and Science:

	S.H.
English 1-2 .....	6
Natural Science .....	8
Language (completion of the third college year) .....	6-18
Religion .....	6
History, Economics or Political Science .....	6

---

32-44

- |  |       |
|--|-------|
| 2. Basic nursing program .....   | 40    |
| 3. At least twelve semester hours in one department other than nursing in courses not primarily open to freshmen ..... | 12    |
| 4. Electives .....   | 24-36 |

In addition to twelve semester hours in one department, the program must include 24 semester hours in courses numbered 100 or above.

A total of 124 semester hours credit and 124 quality points is required for graduation.

Students who have been graduated from the Duke University School of Nursing may obtain the degree of Bachelor of Science by fulfilling all requirements for that degree. Forty semester hours of credit toward this degree are given for the three-year program in the School of Nursing. The requirements for this degree may be found in the bulletin of the undergraduate colleges.

### *Admission With Advanced Standing in the Woman's College*

Students from the School of Nursing who are admitted to the Woman's College may receive credit for college courses taken prior to their admission to the School of Nursing provided they meet the requirements listed below.

A student enrolling for the Bachelor's degree, who transfers from a junior college or from a four-year college not affiliated with the Southern Association or a similar regional association, is under all circumstances required to continue, for at least one semester in the Woman's College the foreign language she presents for minimum graduation requirements. Note: No foreign language is required for the B.S. in Nursing Education.

Credit for courses in science offered for advanced standing by a student transferring from a junior college or from a four-year college not affiliated with the Southern Association or a similar regional association will be determined by the departments concerned.

Transfer credits are tentatively evaluated pending the completion of two semesters work in residence. To validate provisional credits the student must earn at least an average of "C" in a normal load of work. Transfer grades of "C" or above are rated at one quality point per credit hour when validated.

The maximum amount of credit acceptable from a junior college is sixty semester hours, exclusive of physical education. No credit is given for work completed by correspondence, and not more than six semester hours credit is allowed for extension courses. Any extension work accepted must be specifically approved by the Dean of the College.

## *The Curriculum—Basic Program*

<i>Title of Course</i>	<i>Clock Hours</i>	<i>Related Clinical Experience</i>
<hr/>		
1st year—1st semester		
Anatomy and Physiology .....	64	
Physiological Chemistry .....	48	
Nutrition and Cookery .....	48	
Social Psychology .....	32	
Introduction to Nursing .....	16	Ward practice in nursing procedures
Nursing Arts .....	96	2 weeks vacation
<hr/>		
1st year—2nd semester and summer session		
Anatomy and Physiology .....	48	
Microbiology .....	64	
Social Psychology .....	3	Ward practice in nursing procedures
Nursing Arts .....	64	Ward practice in medical and surgical nursing
Medical and Surgical Nursing I ..	128	
Orientation to Health Field .....	48	3 weeks vacation
<hr/>		
2nd and 3rd years		
Medical and Surgical Nursing II ..	64	9 weeks operating room
Obstetrical and Gynecological Nursing .....	48	6 weeks diet kitchen
Pediatric Nursing (including Communicable Disease Nursing)	48	12-16 weeks obstetric and gynecology
Child Growth and Development ..	32	12-16 weeks pediatrics
Psychiatric Nursing .....	48	12-16 weeks psychiatry
Social Foundations of Nursing ...	48	3 weeks out patient
Public Health Nursing .....	48	16 weeks on campus
		(elective classes may be taken in Woman's College, Duke University, during this period)
		7 weeks vacation
		22 weeks medicine and surgery
<hr/>		



# Description of Courses



**ANATOMY AND PHYSIOLOGY.**—Through the learning experiences in this course, the student gains an understanding and appreciation of the way body structure and body functions serve to maintain and promote health. These understandings and appreciations enable the student to practice and teach good hygiene effectively and to comprehend anatomical and physiological pathology intelligently.

DR. MARKFE, DR. SAWYER, MISS SMITH

**PHYSIOLOGICAL CHEMISTRY.**—This course is designed to aid the student in understanding the relationships between chemistry and health and between chemistry and disease. The student also requires knowledge concerning the chemical basis of medical diagnosis and therapy.

DR. TAYLOR

**MICROBIOLOGY.**—From the learning experiences included in this course the student is enabled to understand and appreciate the role in the prevention of microbial disease.

DR. CONANT

**NUTRITION AND COOKERY.**—This course has been planned that the student may gain specific information relative to normal nutrition. The methods of supplying foods conforming to nutritional needs of both the nurse and the patient are given for varying income levels. The actual care and preparation of foods and the planning of a daily food intake according to nutritional needs of both the nurse and the patient are given for varying income levels. The actual care and preparations of foods and the planning of a daily food intake according to nutritional standards is the content of the laboratory periods.

MISS YEARICK

**INTRODUCTION TO NURSING.**—A study of the development of nursing from primitive time to the modern period. The course is designed to give the student an appreciation of nursing in an evolving profession.

MISS INGLES

**NURSING ARTS.**—A study of the fundamentals of healthful living and their adoption to basic nursing care in the home and in the hospital. Considers the nursing needs of individual patients and provides opportunity to plan and give patient care.

MISS CRAWLEY, MISS BASON, MRS. BROCK, MRS. ANDERSON

**SOCIAL PSYCHOLOGY.**—Through a study of the role of social and cultural patterns in their interaction with the individual personality and through an understanding of behavior development and personality adjustment, it is hoped that the student may advance toward maximum personal, social and professional maturity. By exploration of social patterns she learns something of the structure of contemporary society. Through a study of the techniques used in understanding and getting along with others, the student becomes better able to use these techniques in her own contacts with people.

MISS JEFFERS: Special Lectures

**INTRODUCTION TO HEALTH FIELD.**—Discussion of the evolution of the public health movement to its attack on present major health problems of the community, including environmental sanitation. The student gains some acquaintance with agencies and community facilities and is introduced to the use of statistics.

MISS MASSEY

**CHILD GROWTH AND DEVELOPMENT.**—Discussion of the child, his physical, mental, emotional and social growth and development. Includes observation in Child Guidance Conferences.

DR. HOHMAN

**SOCIAL FOUNDATIONS OF NURSING.**—This course is designed to help the student consider the opportunities open to her, her special aptitudes and abilities, her responsibilities, the fields of work for which she presents potentially the best qualifications and how to get started in a professional career. She is helped to see

the place of nursing in the social and economic world of today. Emphasis is placed on the need for cooperation between all professions if satisfactory conditions for the maintenance of health and the prevention of disease are to be realized.

MISS WILSON

**MEDICAL AND SURGICAL NURSING I AND II.**—This course provides knowledge of the common medical and surgical conditions and assists in the gaining of an understanding of the total care of patients, including prevention, treatment on the hospital ward and in the clinics, after care in the home and rehabilitation.

MISS OSTERMAN

**PEDIATRIC NURSING.**—This course adopts previous learning to the care of the sick child, develops and utilizes new skills in promoting more effective nursing care and considers conditions prevalent in infancy and childhood. Emphasis is placed on communicable diseases and their prevention.

MRS. ECKERT

**OBSTETRICAL NURSING.**—A study of the management of the obstetrical patient through all aspects of the prenatal, labor, delivery and puerperium phases of pregnancy. Includes care of the new born and premature infant.

MISS HENDERSON

**PSYCHIATRIC NURSING.**—Discussion of the principles of psychiatric nursing and the nurses' responsibilities in a positive mental health program.

MRS. FLEMING, DR. GOLDSMITH

**PUBLIC HEALTH NURSING.**—Discussion of the development, principles and functions of public health nursing considered as a community health service related to other community health and welfare programs. Special consideration is given to public health nursing within the framework of a rural health department.

MISS MASSEY

# Division of Nursing Education



## *Advanced Professional Programs*

A DIVISION of Nursing Education was established in December, 1944, as an integral part of the Department of Education of Duke University. At the present time, qualified graduate nurses may work toward the degree of Bachelor of Science in Nursing Education.

The primary objective of the degree program for graduate nurses is to prepare qualified individuals for teaching and supervisory positions in schools of nursing and in nursing service agencies. Facilities for instruction include the undergraduate colleges of Duke University, the School of Nursing, the Medical School and Duke Hospital.

### *I. Degree of Bachelor of Science in Nursing Education*

#### ADMISSION

Students who wish to work toward the degree of Bachelor of Science in Nursing Education must apply for admission to the Woman's College of Duke University. To be accepted they must satisfy the following requirements with respect to their high school education:

1. Graduation from an approved secondary school with at least fifteen acceptable units of credit.
2. Twelve units must be in English, foreign language, history and social studies, mathematics and natural science.
3. Three units may be in subjects listed above or in such subjects as art, commercial subjects, household economics, or music.

Students who have satisfactorily completed one or more years of college work in an approved college or university must also fulfill the requirements listed above with respect to high school credit, must present official transcripts of all work done in other institutions, and must have honorable dismissal from each institution previously attended.

Other basic minimum requirements include:

4. Graduation from an approved school of nursing.
5. Satisfactory ratings from individuals, with whom the applicant has had fairly recent contact.

## OUTLINE OF PROGRAM

Credit for 120 semester hours (exclusive of physical education) on which an average grade of at least "C" is made is required for the degree of Bachelor of Science in Nursing Education. The work of the final year must be taken in residence at Duke University. One year of experience as a graduate nurse is required before the degree is awarded. The program of studies leading to this degree must include:

1. Minimum general education requirements (may be satisfied at Duke University or at any accredited college or university).

	S.H.
English 1-2 .....	6
Natural Science .....	8
History, Economics or Political Science .....	6
Sociology .....	3-6
Psychology .....	3-6
Electives .....	12-15
(Literature, art, music, religion, ethics, language)	
	44

2. Basic Nursing Program ..... 40 (maximum)

In evaluating credit the standing of the School of Nursing, the record of the individual student, and scores on basic nursing achievement tests administered by the Department of Measurement and Guidance of the National League of Nursing Education to all candidates as soon as they enroll in their first course are taken into consideration.

3. Courses in Education and Nursing Education.

	S.H.
88. Educational Psychology: Learning and Measurement .....	3
118. Educational Psychology: Psychological Development .....	3
84N. Social Foundations of Nursing Education .....	3
101N. The Curriculum of the School of Nursing .....	3
115N. } Nursing Education—Principles and Practices .....	8
116N. }	
117. Community Nursing—Seminar and Field Trips to Community Agencies .....	3
	23

4. Minimum of fifteen semester hours in one field, such as zoology, chemistry, physics, sociology, or psychology, or in a clinical area.

The following courses in clinical areas are offered at present:

	S.H.
130N. Psychosomatic Nursing .....	4
131N. } Psychiatric Nursing .....	8
132N. }	
133N. Seminar in Psychiatric Nursing .....	3
134N. } Medical and Surgical Nursing .....	8
135N. }	
136N. Seminar in Medical and Surgical Nursing .....	3

Other courses which are offered to graduate nurses are as follows:

192N. Principles and Methods of Teaching in School of Nursing .....	3
193N. Ward Administration and Teaching .....	3
195N. Personnel Work in Schools of Nursing .....	3
124N. Problem in Nursing Care .....	2

## *II. Degree of Master of Education With a Major in Nursing Education*

Nursing Education

(Not offered in 1951-52)

### ADMISSION

A student who wishes to work toward the degree of Master of Education with a major in Nursing Education must apply for admission to the Graduate School of Duke University. To be eligible for admission as a candidate for this degree she must meet the following requirements:

- (1) Graduation from an approved college or university with an average grade of not less than "B."
- (2) Satisfactory standing on the Graduate Record Examination.
- (3) Satisfactory standing on a test of mental ability.
- (4) Ability to write acceptable English as demonstrated on a test.
- (5) Graduation from an approved school of nursing.
- (6) Satisfactory ratings from three individuals, preferably former teachers and supervisors with whom the individual has had fairly recent contact.

### OUTLINE OF PROGRAM

Basic Required Courses in Education:		S.H.
300. Methods of Educational Research .....	3	
304. The School as an Institution .....	3	
305. The Nature, Function, and Reorganization of the Curriculum .....	3	
317. The Psychological Principles of Education .....	3	
		<hr/>
		12
Courses in Nursing Education:		
310. Organization and Administration of Schools of Nursing .....	4	
311. Problems in Personnel Administration in Nursing .....	4	
312. Research Problem .....	4	
		<hr/>
		12
Minor, intra-departmental or extra-departmental .....	6	
		<hr/>
		30

Candidates for the Master of Education degree must have had two years of experience including administration, supervision, or teaching in a school of nursing or nursing service organization when the degree is granted.

## *III. Tuition, Fees, and Other Expenses*

### FEES PER SEMESTER

A matriculation fee of \$20.00 is paid at the time of acceptance to Woman's College.



Tuition .....	\$175.00
General Fee (Undergraduate) including health, library and incidental fees .....	75.00
General Fee (Graduate School) .....	60.00
Laboratory Fee (amount depends upon course which is taken)	

### LIVING ARRANGEMENTS

Students may make their own arrangements to live in private homes. A limited number of students can be housed in the Graduate Nurses' Residence, 2204 Erwin Road. The cost of living in this residence is as follows:

Single room (per semester) .....	\$87.50
Double room (per semester) .....	67.50
Meals can be secured at a nominal rate at University cafeterias.	

### EMPLOYMENT

A limited number of nurses may be employed at Duke Hospital during the time they are taking courses at Duke University. Nurses who are working full-time (44 hours per week) may take one course each semester. Nurses who wish to reduce hours of work per week to 36, with a corresponding reduction in salary, may take two courses each semester.

Full-time students in advanced medical and surgical nursing may work 18 hours per week for board and room with permission of instructor.

For information about employment write to the Director of Nursing Service, Duke Hospital.

## *IV. Program in Psychiatric Nursing*

A twelve-month program in psychiatric nursing is offered to qualified graduate nurses. The primary objective of this program is to prepare individuals for head nurse positions in psychiatric units of hospitals, child guidance clinics, and related fields. Students who wish to qualify for supervisory or teaching positions in the psychiatric field are advised to complete the program which leads to the degree of Bachelor of Science in Nursing Education.

Facilities for clinical teaching and experience include the psychiatric in-patient unit, the out-patient department, the psychosomatic service of Duke Hospital, child guidance clinics, and the State Hospital in Raleigh, N. C.

Students have approximately 20 hours per week of carefully planned laboratory practice on clinical services, during which time they work closely with patients presenting a wide variety of emotional disturbances. They also have an opportunity to participate in staff conferences and clinics at Duke Hospital and at the State Hospital in Raleigh.

Approximately 30 semester hours of credit toward the Bachelor of Science in Nursing Education degree may be earned during the calendar year.

A limited number of training stipends are available through the U. S. Public Health Service for those nurses who have demonstrated particular interest and aptitude in this field.

Requirements for admission are the same as for all students admitted to the program which leads to the degree of Bachelor of Science in Nursing Education.

### OUTLINE OF PROGRAM (ONE YEAR)

Fall Semester		Credits
Educ. 130N	Psychosomatic Nursing .....	4
Educ. 131N	Psychiatric Nursing .....	4
Soc. 101	General Sociology .....	5
Educ. 84N	Social Foundations of Nursing Education .....	3
		<hr/> 16
Winter Semester		
Educ. 132N	Psychiatric Nursing .....	4
Educ. 120N	Problem in Nursing Care .....	2
Educ. 193N	Ward Administration and Teaching .....	3
Psych. 116	Psychology of Adjustment .....	3
		<hr/> 12
Summer		
Educ. 133N	Seminar in Psychiatric Nursing .....	3

## *V. Program in Medical and Surgical Nursing*

A twelve-month program in medical and surgical nursing is offered to qualified graduate nurses. The primary objective of this program is to prepare individuals for head nurse positions in medical and surgical units of hospitals. Credit for the entire program applies toward the degree of Bachelor of Science in Nursing Education. Students who are interested in teaching and supervision in medical and surgical nursing are urged to complete all requirements for the degree.

### OUTLINE OF THE PROGRAM

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
130N Psychosomatic Nursing ..	4	193N Ward Administration and Teaching .....	3
134N Medical and Surgical Nursing .....	4	135N Medical and Surgical Nursing .....	4
84N Social Foundations of Nursing Education ....	3	117N Community Nursing ....	3
Elective .....	3-6	Elective .....	3-6
<hr/> 14-17		<hr/> 13-16	

### SUMMER SESSION

S136N Seminar in Medical and Surgical Nursing .....	3
S124N Problem in Nursing Care .....	2

The courses in medical and surgical nursing and in psychosomatic nursing will include from four to 16 hours per week of field work in medical and surgical divisions and medical and surgical out-patient clinics of Duke Hospital, and with various community health and social agencies. Students who are interested in a particular medical or surgical specialty (orthopaedic nursing, neurosurgical nursing, etc.) may have added experience in that area during the summer months. For some students experiences in other hospitals may be arranged.

Requirements for admission are the same as for all students admitted to the program which leads to the degree of Bachelor of Science in Nursing Education.

## *VI. Clinical Program in Operating Room Nursing*

A program in operating room nursing of nine months in length is offered to qualified graduate nurses who are interested in preparing for head nurse positions in an operating room.

### ADMISSION

An individual who is interested in the program in operating room nursing must apply for admission to the Woman's College of Duke University as a *special* student. To be admitted as a special student the following records are required:

1. Transcript of high school or of college record.
2. Transcript of nursing school record.
3. Satisfactory rating from a nursing service administrator or supervisor with whom the applicant has had recent contact.

In addition to the above requirements an applicant must have had a minimum of six months' experience as an operating room nurse.

### OUTLINE OF PROGRAM

\*Courses in Nursing Education and Related Subjects

	<i>Credits</i>
84N. Social Foundations of Nursing Education .....	3
120. Problem in Nursing Care .....	2
193. Ward Administration and Teaching .....	3
195. Personnel Work in School of Nursing .....	3
Elective .....	3
	<hr/> 14

### CLASSES AND RELATED EXPERIENCE IN OPERATING ROOM NURSING

The course in operating room nursing includes 60 hours of organized class work during the period of nine months and an average of 36 hours each week on duty, of which 18 hours is supervised experience. The class work includes a discussion of the facts and principles

\* Credit toward the degree of B.S. in Nursing Education is given for these courses.

of chemistry, bacteriology, anatomy and physiology, underlying preparation for and assistance with surgical operations, both general and special. The history of anesthesia is presented, as well as present day trends and developments in the field.

In the related field work the nurse becomes acquainted with the functions of various departments of the hospital and their relationship to the operating room. She has an opportunity to prepare for and assist with various surgical operations including general surgery, chest surgery, neuro-surgery, orthopaedic surgery, urological surgery, plastic surgery and eye, ear, nose and throat surgery. She is also given an opportunity to assist with administrative and supervisory functions in the operating room, and with planning and conducting a teaching program for students and others.

### FEES

Each student pays the regular University fees for courses in Nursing Education and related subjects. The fee per credit hour is \$12.00 (1949-50). In addition a matriculation fee of \$5.00 is paid each semester.

### LIVING ARRANGEMENTS

Students who are taking the course in operating room nursing receive full maintenance in return for service to the hospital.

### HEALTH CARE

Each student is required to carry hospitalization insurance to cover the cost of hospitalization during illness.

A sick leave of seven days is given during the nine months period.

### DATES OF ADMISSION

Students are admitted to the program in operating room nursing at the beginning of each semester.

### CERTIFICATE

At the completion of the nine months program in operating room nursing the student is granted a certificate.

### INFORMATION

For further information about any program write to Director of the Division of Nursing Education, Duke Hospital, Durham, North Carolina. Application for admission to the Woman's College should be made to the Committee on Admissions, College Station, Durham, North Carolina.

# Description of Courses



84N. SOCIAL FOUNDATION OF NURSING EDUCATION.—A special section of Education 84, applied to Nursing Education. A survey of major historical, philosophical, and sociological factors which have affected developments in nursing and Nursing Education. The purpose of the course is to give the student a better understanding of the place of nursing in present day society and the responsibilities of the individual nurse toward that society. 3 s.h. ASSISTANT PROFESSOR INGLES

101N. THE CURRICULUM IN THE SCHOOL OF NURSING.—The general principles of curriculum making and the factors which determine the content and organization of the nursing school curriculum are considered in this course. 3 s.h. ASSISTANT PROFESSOR SMITH, ASSISTANT PROFESSOR INGLES

115N-116N. NURSING EDUCATION: PRINCIPLES AND PRACTICE.—A special section of Education 115-116. Principles of teaching applied to the nursing school situations and the planning and evaluation of instruction. Ninety hours of observation and of supervised teaching in the Duke University School of Nursing are required. Four hours of conference, observation, and practice teaching are required each week. Before beginning practice teaching, students must complete thirty hours of observation. (Not open to students who have had course 115-116.) 8 s.h. ASSISTANT PROFESSOR SMITH

117N. COMMUNITY NURSING SERVICE.—Designed for administrators, teachers, and supervisors in schools of nursing. Emphasis is on the integration of outpatient departments and community social and health agencies into the nursing school curriculum and on the preparation of nurses for community service. 3 s.h. ASSISTANT PROFESSOR MASSEY

120N. NURSING EDUCATION: PROBLEMS IN NURSING CARE.—Each student works on an individual problem designed to improve the nursing care of patients. 3 s.h. ASSISTANT PROFESSOR INGLES, ASSISTANT PROFESSOR MOSER

124N. NURSING EDUCATION: TEACHING OF THE NURSING ARTS.—In this course an effort is made to help prospective teachers to integrate the facts and principles of the natural, social, and medical sciences into the teaching of nursing arts. Though major emphasis is placed upon problems which are involved in teaching the first course, the concept of the nursing arts as an integral part of each clinical area is stressed. 3 s.h. STAFF

130N. PSYCHOSOMATIC NURSING.—A study of the close relationship between mind and body in all illness and of the techniques of observation and interview both experimental and therapeutic. Lectures, clinics, conferences, discussions, and experience with patients. 4 s.h. ASSISTANT PROFESSOR MOSER

131N-132N. PSYCHIATRY AND PSYCHIATRIC NURSING.—An advanced study with special emphasis on personality development and the preventive and therapeutic aspects of psychiatry and psychiatric nursing. In the second semester the management of practical situations of increasing complexity is stressed. Lectures, clinics, conferences, discussions, and experience with patients. 8 s.h. ASSISTANT PROFESSOR MOSER

133N. SEMINAR IN PSYCHIATRIC NURSING.—Special study of areas such as behavior problems of children, projective tests, group therapy, mental hygiene clinics, etc. 3 s.h. ASSISTANT PROFESSOR MOSER

134N-135N. ADVANCED MEDICAL AND SURGICAL NURSING.—A study of the medical and surgical aspects of selected diseases aimed at giving the student a better comprehension of the total care necessary to bring about the best possible results for patients. Lectures, discussions, case histories, and planned observation and experience with patients. 8 s.h. ASSISTANT PROFESSOR INGLES



136N. SEMINAR IN MEDICAL OR SURGICAL SPECIALTY.—Directed study in a selected medical or surgical specialty. Each student works on a problem of major interest to her. Individual research in the collection of original material. 3 s.h.

ASSISTANT PROFESSOR INGLES

192N. PRINCIPLES AND METHODS OF TEACHING IN SCHOOLS OF NURSING.—The primary purpose of this course is to help teachers in schools of nursing to understand and to utilize generally accepted principles of learning and to carry out a more effective teaching program in a school of nursing. Instruction is given in the planning of courses, in methods of teaching in classrooms and in hospital divisions, in construction of examinations, and in the utilization of other methods of determining the effectiveness of a teaching program. 3 s.h.

ASSISTANT PROFESSOR SMITH

193N. WARD ADMINISTRATION AND TEACHING.—This course is designed to help head nurses better to understand their functions in planning and managing a program on a hospital division which will result in improved care of patients, greater satisfaction for professional and non-professional personnel, and a more adequate teaching program for students and others. 3 s.h.

ASSISTANT PROFESSOR INGLES

195N. PERSONNEL WORK IN SCHOOLS OF NURSING.—The primary purpose of this course is to help head nurses and supervisors to develop greater understanding of the principles of human behavior and greater ability to apply these principles in working with patients and others on hospital divisions, and in establishing cooperative relationships with other departments of the hospital. 3 s.h.

ASSISTANT PROFESSOR SMITH

# Public Health Nursing



SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF NORTH CAROLINA  
CHAPEL HILL, N. C.

## *Public Health Nursing*

The program of study in Public Health Nursing is designed to prepare registered professional nurses to carry on the functions of public health nursing in local health departments, visiting nurse associations, or joint health agencies.

Curricula leading to a certificate or baccalaureate degree in Public Health Nursing are offered.

### REQUIREMENTS FOR ADMISSION

#### *General:*

1. Ability to meet the regular entrance requirements of the University.
2. Graduation from an approved school of nursing offering a satisfactory theoretical and clinical experience.
3. Acquisition of the status of a registered nurse in any state.

#### *Specific:*

1. Candidates for the Certificate in Public Health Nursing:
  - (a) General requirements above.
2. Candidates for the degree of Bachelor of Science in Public Health Nursing:
  - (a) General requirements.
  - (b) Two years of prescribed academic work in an accredited university or college.
  - (c) Approval of the Committee on Admissions to the curriculum for the Bachelor of Science in Public Health Nursing.
3. Candidates for the Master of Public Health degree:

Graduation from an approved school of nursing and graduation with a bachelor's degree from an accredited college or university. The undergraduate program must have included at least eight courses in the natural sciences, and it is desirable that the student shall have had work in social science and education.

### PLAN OF INSTRUCTION

The calendar year's curriculum in Public Health Nursing is required of all majors in this field. While there is a prescribed curriculum of study, a program will be arranged on an individual basis with consideration for the educational and experiential background of the student. The program is so arranged that students are admitted in the Fall Quarter and are expected to remain for at least three consecutive quarters. With the approval of the Department, public health nurses with experience may be admitted in the summer provided they plan to remain for a minimum of three consecutive quarters. Field work is an essential part of the program and is re-

quired for either the degree or the certificate. Exceptions may be made where a quarter of supervised field experience has been previously taken in an approved University program, or on approval of the curriculum committee.

### CURRICULUM IN PUBLIC HEALTH NURSING

<i>Required Courses:</i>	<i>Credit Hours</i>
P.H. 101 Epidemiology .....	3
P.H. 111 Public Health Administration .....	3
P.H. 114 Mental Hygiene .....	2
P.H. 131 Parasitism and Human Disease .....	3½
P.H. 141 Public Health Nutrition .....	3
P.H. 190 Principles and Practices of Public Health Nursing .....	5
P.H. 191 Public Health Nursing Organization and Administration ...	5
P.H. 192 Group Work: Its Interpretive Factors .....	3
P.H. 193 Applied Public Health Nursing Field Practice .....	15
P.H. 195 The Public Health Nurse in a Maternal Health Program ..	3
P.H. 196 Special Fields in Public Health Nursing .....	5
Soc. 51 An Introduction to Sociology .....	5
P.H. 198 Growth and Development of the Child .....	3
P.H. 118 Health and Sickness in Modern Society .....	3

For experienced students or graduates of university schools of nursing who have had an acceptable course in any of the above, an elective may be substituted.

### BACHELOR OF SCIENCE IN PUBLIC HEALTH NURSING

Because of the increasing demands of public health departments for nurses with a baccalaureate degree, it is desirable for students to enroll in the curriculum leading to the degree of Bachelor of Science in Public Health Nursing.

Candidates for this degree must fulfill the following requirements:

1. Satisfactory completion of 90 quarter hours (60 semester hours) in an accredited college or university. The amount of credit not exceeding 90 quarter hours extended for work in other colleges will be determined by the Committee on Admissions.

(a) *Required:*

24 quarter hours in the natural sciences, selected from zoology, botany, chemistry, physics, psychology.

20 quarter hours in English.

10 quarter hours in the social sciences, selected from sociology, upper division psychology, history.

(b) *Electives:*

The departmental adviser will assist the student in the selection of the remaining courses (36 quarter hours) with reference to her individual needs.

2. Graduation from an approved school of nursing, with credit to be determined by the Committee on Admissions.
3. Satisfactory completion of the curriculum in Public Health Nursing in the School of Public Health at the University of North Carolina.

### TUITION AND FEES

The tuition is \$100.00 a quarter. This includes the following University charges for each quarter:

Matriculation .....	\$21.00
Student Activities .....	3.85
Special Library Fee .....	3.00
Woman's Association (women students only) .....	1.00

The laboratory fee for the field quarter in Public Health Education and Public Health Nursing is \$300.00 in addition to the \$100.00 tuition.

## *Master of Public Health*

The course leading to the degree of Master of Science in Public Health is designed to provide a broad training in the basic health sciences and is intended to prepare students for professional careers in several vital fields of public health.

*Requirements for Admission:* For admission to the program of study leading to this degree students in nursing must satisfy with an acceptable record the following requirement:

1. Graduation from an approved school of nursing and graduation with a bachelor's degree from an accredited college or university. The undergraduate program must have included at least eight courses in the natural sciences, and it is desirable that the student shall have had work in social science and education.

*Requirements for the Degree:* The following are the principal requirements for the degree:

1. A period of residence of at least one academic year at the University. For nurses and health educators an additional period of three months devoted to field training under the supervision of the University is required. For other personnel the field training is at present optional.
2. The completion with high grades of an approved program of courses which includes public health administration, epidemiology, sanitation, bacteriology, and statistics. The course program shall involve credits of not less than 45 quarter-hours nor more than 60 quarter-hours.
3. A final written comprehensive examination in the field of the student's major interest, and a comprehensive oral examination on the entire program of study.

Candidates for this degree must complete all the requirements within six years from the time of their first matriculation in the program. Students completing their program over a period of years will be required to satisfy all requirements for the degree which are in effect in the final year of their work.

# Index

Abbott, Heleu .....	4, 11	Clinical Facilities .....	13, 19
Academic-Professional Programs in		Combined Academic-Professional	
Nursing, Combined .....	26	Programs in Nursing .....	26, 27
Activities Offered (School of Nursing) ..	23	Committees of the School of Nursing ....	4
Adams, Ruth .....	4, 6	Committee on the Baccalaureate Degree	
Administrative Nurses in Out-Patient		for Nurses .....	4
Dept. ....	14	Conant, Norman F. ....	29
Admission (School of Nursing) .....	19	Crawley, Hattie Mildred .....	4, 6, 29
Admission with Advanced Standing		Curriculum (Basic Program) .....	23
in Woman's College .....	27	Curriculum Committee .....	4
Admissions Committee .....	4	Curriculum in Public Health Nursing ...	41
Advanced Professional Programs		Dates of Admission (O.R. Nursing) ....	37
(Division of Nursing Education) ....	31	Davison, W. C. ....	4, 9
Alderman, Rebecca L. ....	12	Dees, Susan Coons .....	9
Alumnae Association (Duke Univ.		Degree of Bachelor of Science in	
School of Nursing) .....	23, 24	Nursing Education .....	31, 32
Alyea, Edwin P. ....	8	Degree of Master of Education with a	
Anderson, Marjorie .....	4, 6, 29	Major in Nursing Education .....	33, 34
Auderson, William Banks .....	3	Description of Courses (Basic	
Application for Admission (School		Program) .....	29, 30
of Nursing) .....	19	Dismissal (School of Nursing) .....	23
Assistant Head Nurses & General		Division of Nursing Education	
Staff Nurses .....	14	(Dept. of Education) .....	3
Assistant Residence Directors .....	11	Division of Nursing Education	
Awards to Nurses .....	25	(Description of Courses, etc.) .....	31-39
Bachelor of Science in Nursing		Division of Nursing Education	
Education, Degree of .....	31, 32	Dept. of Education (Instructional	
Bachelor of Science in Public		Staff) .....	7, 8
Health Nursing .....	41, 42	Eagle, Watt W. ....	9
Bagby Award in Pediatrics .....	25	Eckert, Barbara .....	4, 6, 30
Baird, Jean H. ....	12	Edens, Arthur Hollis .....	3
Baker, Lenox D. ....	8	Elliott, Gertrude H. ....	12
Barnhart, Betty .....	4	Emlet, Ruth S. ....	12
Bason, Betty .....	4, 7, 29	Employment (Graduate Nurses	
Batchelder, Marion .....	12	Taking Courses) .....	34
Benson, Ethel M. ....	12	Evaluation Committee .....	4
Botwin, Ethel S. ....	4, 11	Executive Committee of the Schools	
Brinkley, Roberta .....	3, 4	of Medicine and Nursing .....	4
Brock, Helen E. ....	4, 7, 29	Facilities for Instruction .....	13
Brower, Alfred S. ....	3	Fees and Expenses (School of Nursing) 21	
Bryant, Jeannette .....	4, 12	Fees (Operating Room Nursing) .....	37
Burgett, Floreuce .....	8	Fees per Semester (Div. of Nursing	
Calendars of the Colleges .....	2	Education) .....	33
Callaway, Jasper Lamar .....	8	Fleming, Julia .....	4, 6, 12, 30
Cain, Iva O. ....	12	Florence Nightingale Plaque .....	25
Carson, Kyle .....	4, 12	Flowers, Robert Lee .....	3
Carter, Bayard .....	4, 3	Forbus, W. D. ....	4
Carter, Ruth .....	4, 6	Galloway, Olive .....	4, 6
Certificate (Operating Room Technique) 37		General Administration .....	3
Clark, Lelia .....	3, 4, 5, 12	General Information (School of	
Class and Related Experiences in		Nursing) .....	13-25
O.R. Nursing .....	36		



Goldsmith, Jewett .....	9, 30	Nursing Staff of Duke Hospital .....	12
Graduate Staff .....	12-16	Officers of Administration .....	3
Gray, I. E. ....	4	Operating Room Nursing (Outline of Clinical Program) .....	36, 37
Gross, Paul M. ....	3	Opportunities in Nursing .....	17
Hall, G. F. ....	4	Orgain, Edward S. ....	10
Harris, Jerome S. ....	9	Osterman, Marie .....	4, 5, 30
Hart, Deryl .....	4, 9	Outline of Program (Degree of Bachelor of Science in Nursing Education) ...	32
Head Nurses .....	13	Outline of Program (Degree of Master of Education with a Major in Nursing Education) .....	33
Health Care .....	37	Persons, Elizabeth A. ....	3
Health Regulations and Physical Education .....	22	Persons, Walter S. ....	10
Henderson, Wanda .....	4, 6, 30	Pickrell, Kenneth .....	10
Herring, Herbert J. ....	3	Plan of Instruction (Public Health Nursing) .....	40
Holman, Leslie B. ....	4, 9, 29	Pope, Hilda .....	10
Hospital Health Service .....	11	Pope, Lillie S. ....	13
Information, General (School of Nursing) .....	18-25	Porter, Ross .....	4
Information (Graduate School) .....	37	Prevatt, Sally .....	4, 11
Ingles, Thelma .....	4, 7, 29, 38, 39	Procedure Committee .....	4
Instructional Staff (School of Nursing) ..	5	Program of the School of Nursing .....	26
Jeffers, Frances .....	3, 4, 5, 29	Psychiatric Nursing, Program in .....	34-35
Jenkins, Marianna .....	3	Public Health Nursing .....	40-42
Jernigan, Evelyn .....	11	Readmission .....	23
Johnson, Eula V. ....	7	Residences .....	22
Jordan, Charles E. ....	3	Residences (Directors) .....	11
Kaiser, Helen L. ....	9	Requirements for Admission (Public Health Nursing) .....	40
Leave of Absence .....	23	Requirements, Specific (School of Nursing) .....	20
Libraries .....	19	Santa Filomena .....	24
Library Committee .....	4	Sawyer, Charles H. ....	10, 29
Living Arrangements (Division of Nursing Education) .....	34	School of Nursing .....	17
Living Arrangements (Operating Room Nursing) .....	37	Sherwood, Mildred .....	4, 13
Loan Fund & Scholarship .....	22	Singleton, Mary .....	10
Lutz, Anne C. ....	7	Smith, David T. ....	4
Lyman, Richard S. ....	4	Smith, Dorothy M. ....	4, 5, 7, 29, 38, 39
McBryde, Angus .....	9	Specific Requirements (School of Nursing) .....	20
Markee, J. E. ....	4, 9, 29	Stead, Eugene A. ....	4, 10
Markham, Charles B. ....	3	Suitt, Julia B. ....	13
Martin, Elsie W. ....	9	Supervisors .....	12, 13
Martin, Ruth C. ....	10	Taylor, Haywood M. ....	10, 29
Massey, Lucy .....	3, 4, 5, 7, 29, 30, 38	Truscott, Jane W. ....	4, 11
Master of Public Health .....	42	Tuition, Fees & Other Expenses (Div. of Nursing Education) .....	33
Matthews, Martha .....	10	Tuition & Fees (Public Health Nursing) ..	41
Medical and Surgical Nursing, Program in .....	35, 36	Wannamaker, William H. ....	3
Members of Other Faculties of the University, Giving Instruction .....	8	Wilson, Florence K. ....	3, 4, 5, 8, 12, 30
Menefee, Elijah E. ....	10	Yearick, Elizabeth .....	10, 29
Mitchell, Margaret .....	4, 13		
Moseley Award .....	25		
Moser, Lonise .....	4, 7, 38		





# BULLETIN OF DUKE UNIVERSITY



## The School of Law

ANNOUNCEMENTS FOR 1951-1952

VOLUME 23

May, 1951

NUMBER 7

# Annual Bulletins

FOR GENERAL BULLETIN of Duke University, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF UNDERGRADUATE INSTRUCTION, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE COLLEGE OF ENGINEERING, apply to *The Secretary*, Duke University, Durham, N. C.

FOR BULLETIN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES, apply to *The Dean of the Graduate School*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF FORESTRY, apply to *The Dean of the School of Forestry*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF MEDICINE, apply to *The Dean of the School of Medicine*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF NURSING, apply to *The Dean of the School of Nursing*, Duke University, Durham, N. C.

FOR BULLETIN OF THE DIVINITY SCHOOL, apply to *The Dean of the Divinity School*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SCHOOL OF LAW, apply to *The Dean of the School of Law*, Duke University, Durham, N. C.

FOR BULLETIN OF THE SUMMER SESSION, apply to *The Director of the Summer Session*, Duke University, Durham, N. C.

Published by Duke University monthly except in July, August, September, and December. Entered as second-class matter March 25, 1929, at the Post Office of Durham, North Carolina, under the Act of August 24, 1912.



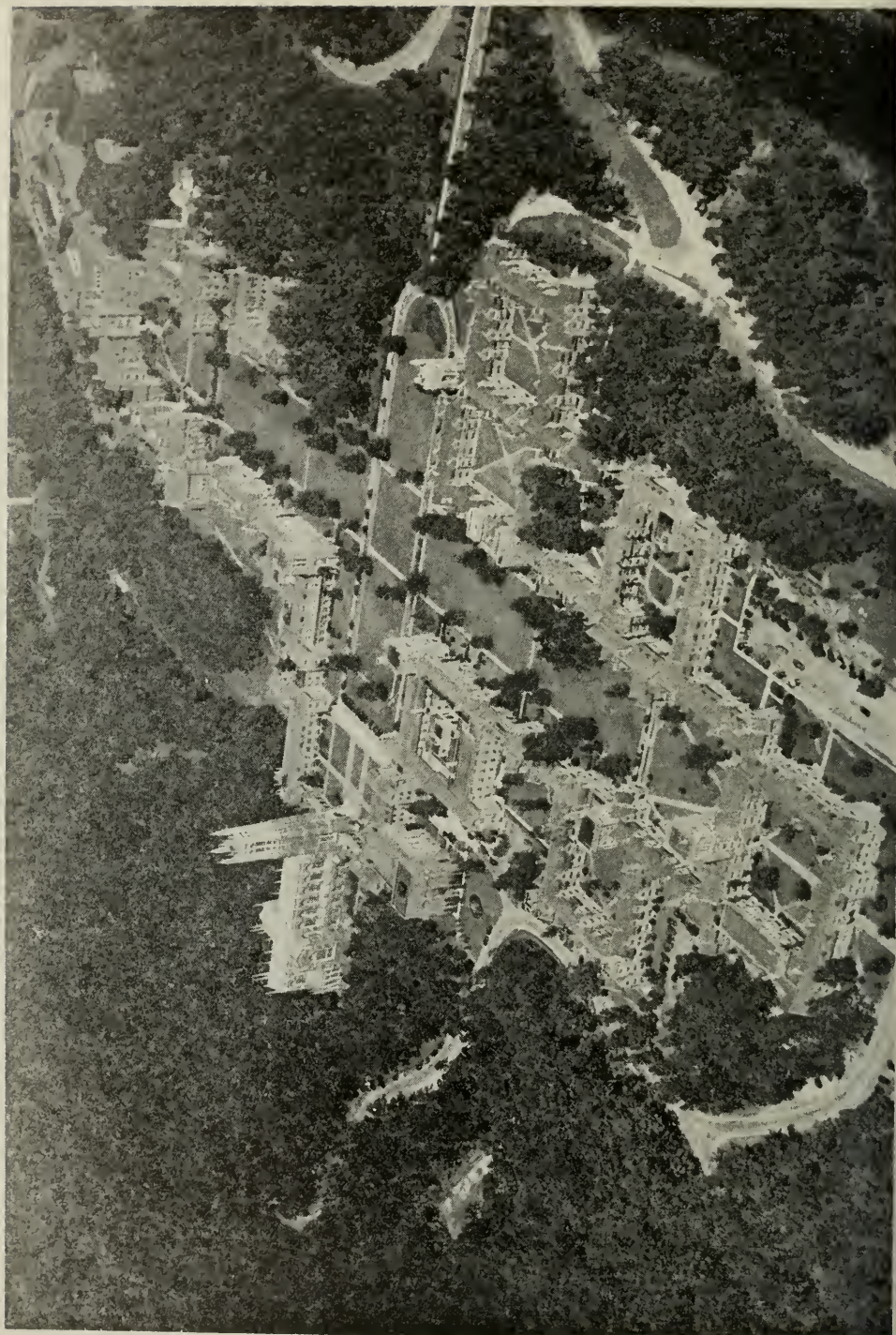
BULLETIN  
OF  
DUKE UNIVERSITY

THE SCHOOL OF LAW



ANNOUNCEMENTS FOR 1951-1952

DURHAM, NORTH CAROLINA  
1951



# Contents



	PAGE
FACULTY .....	4
CALENDAR .....	7
THE SCHOOL: ITS PURPOSES AND METHODS.....	8
ADMISSION OF STUDENTS—REGISTRATION—FEES.....	9
BACHELOR OF LAWS DEGREE.....	16
GRADUATE WORK IN LAW.....	18
FACILITIES AND ACTIVITIES.....	21
PROGRAM OF INSTRUCTION.....	25
DESCRIPTION OF COURSES.....	29
STUDENTS.....	35

# Faculty



ARTHUR HOLLIS EDENS, B.Ph., A.M., M.P.A., Ph.D., LL.D., *President of the University*

JOSEPH A. MCCLAIN, JR., A.B., LL.B., J.S.D., LL.D., *Dean and Professor of Law*

A.B. 1925, LL.B. 1924, LL.D. 1941, Mercer University; J.S.D. 1929, Yale University; LL.D. 1944, Tulane University; Practice, Columbus, Georgia, 1925-1926; Professor of Law, Mercer University, 1926-1927; Dean and Professor of Law, Mercer University, 1927-1933; Professor of Law, University of Georgia, 1933-1934; Dean and Professor of Law, University of Louisville, 1934-1936; Tulane University, Summer 1937; Dean and Professor of Law, Washington University (St. Louis), 1936-1942; Member of Council of Section on Legal Education and Admissions to Bar of ABA, 1942-1948, Chairman of Section, 1945-1947, House of Delegates, ABA, 1948-1950; Vice-President and General Counsel, Terminal R.R. Association of St. Louis, 1942-1945; General Counsel, Wabash R.R. Company, 1945-1950; Dean and Professor of Law, Duke University, since 1950.

W. BRYAN BOLICH, A.B., B.A. (Juris.), M.A., B.C.L., *Professor of Law*

A.B. 1917, Duke University; Duke University Law School, 1919-21; B.A. (Juris.) 1923, B.C.L. 1924, M.A. 1928, Oxford University; general practice, 1924-27; Professor of Law, Duke University, since 1927.

JOHN S. BRADWAY, A.B., A.M., LL.B., *Professor of Law and Director of the Legal Aid Clinic*

A.B. 1911, A.M. 1915, Haverford College; LL.B. 1914, University of Pennsylvania; general practice, 1914-29; Legal Aid Society of Philadelphia, 1914-20; chief counsel, Philadelphia Legal Aid Bureau, 1920-22; Secretary, National Association of Legal Aid Organizations, 1923-40, President, 1940-42; Visiting Professor of Law and Director of the Legal Aid Clinic, University of Southern California, summer 1928; Professor of Law and Director of the Legal Aid Clinic, University of Southern California, 1929-31; Visiting Professor, University of North Carolina School of Social Work, Winter and Spring Quarters, 1949 and 1950; Professor of Law and Director of the Legal Aid Clinic, Duke University, since 1931.

EDWIN C. BRYSON, LL.B., *Associate Professor of Law*

University of North Carolina, 1922-25; Duke University, 1932-33; LL.B. 1937, University of Oregon; general practice, 1927-30; assistant in Duke University Legal Aid Clinic, 1931-47; Duke University Counsel since 1945; Associate Professor of Law, Duke University, since 1947.

ROBINSON O. EVERETT, A.B., LL.B., *Assistant Professor of Law; Associate Editor of Law and Contemporary Problems; Associate Editor of Journal of Legal Education; Faculty Adviser, Duke Bar Journal*

A.B. 1947, LL.B. 1950, Harvard University; Assistant Professor of Law, Duke University, since 1950.

H. CLAUDE HORACK, Ph.B., LL.B., LL.D., *Professor of Law Emeritus*

Ph.B. 1899, LL.B. 1900, State University of Iowa; LL.B. 1904, Harvard University; LL.D. 1937, Tulane University; LL.D. 1939, Wake Forest College; Assistant Professor of Law, University of Wisconsin, 1904-07; Professor of Law, State University of Iowa, 1907-30; University of Michigan, summer 1922; University of Wisconsin, summer 1924; University of Southern California, summer 1931; Stanford University, summer 1936; Adviser, Council of Legal Education and Admissions to the Bar of the American Bar Association, 1927-30, member of Council, 1940-45; Secretary, Association of American Law Schools, 1926-28, President, 1929. Dean and Professor of Law, Duke University, 1934-47; Professor of Law, 1930-34, 1947-48; Professor of Law Emeritus, since 1948.

ROBERT KRAMER, A.B., LL.B., *Professor of Law; Editor, Law and Contemporary Problems; and Editor, Journal of Legal Education*

A.B. 1935, LL.B. 1938, Harvard University; Counsel, National Labor Relations Board, 1938-40; Counsel, Anti-Trust Division, Department of Justice, 1941-42; Military service, 1940-41, 1942-46, Lieutenant Colonel, Ordnance Department, Army of the United States. Legal Division, Office Chief of Ordnance, general counsel, Research and Development Service, Ordnance Department; general practice, 1946-47; Associate Professor of Law, Duke University, 1947-49; Professor of Law, since 1949.

ELVIN R. LATTY, B.S., J.D., J.Sc.D., *Professor of Law*

B.S. 1923, Bowdoin College; J.D. 1930, University of Michigan; J.Sc.D. 1936, Columbia University; Instructor in Romance Languages, University of Vermont, 1923-27; general practice, 1930-33; Special Fellow, Columbia University, 1933-34; Associate Professor of



Law, University of Kansas, 1934-35; Professor of Law, University of Missouri, 1935-37; George Washington University, summer 1937; Stanford University, summer 1938; University of North Carolina, summer 1942, 1947, 1949; Special Assistant to the American Ambassador, Caracas, 1942-43; Acting Assistant Chief, Foreign Funds Control Division, Department of State, 1943; Professor of Law, Duke University, since 1937.

**CHARLES H. LIVENGOOD, JR., A.B., LL.B., *Associate Professor of Law***

A.B. 1931, Duke University; LL.B. 1934, Harvard University; general practice, 1934-40; Regional Attorney for the Seventh Region, Wage and Hour Division, U. S. Department of Labor, 1940-41; Chief Wage-Hour Section, Office of the Solicitor of Labor, 1941-42; Lieutenant (j.g.) and Lieutenant, U.S.N.R., 1942-45; in general practice, 1945-48; lecturer on *Labor Law and Criminal Law*, Duke University, 1946-48; University of North Carolina, summer 1948; George Washington University, summer 1949; Associate Professor of Law, Duke University, since 1948.

**CHARLES L. B. LOWNDES, A.B., LL.B., S.J.D., *Professor of Law***

A.B. 1923, Georgetown University; LL.B. 1926, S.J.D. 1931, Harvard University; general practice, 1926-27; Assistant Professor of Law, Georgetown University, 1927-28; Professor of Law, Georgetown University, 1928-30; Research Fellow, Harvard Law School, 1930-31; Professor of Law, Georgetown University, 1931-34; Professor of Law, Duke University, since 1934.

**MALCOLM McDERMOTT, A.B., LL.B., *Professor of Law***

A.B. 1910, Princeton University; LL.B. 1913, Harvard University; general practice, 1913-30; Dean, College of Law, University of Tennessee, 1920-30; University of Southern California, summer 1929; Professor of Law, Duke University, since 1930.

**DOUGLAS BLOUNT MAGGS, A.B., J.D., S.J.D., *Professor of Law***

A.B. 1922, J.D. 1924, University of California; S.J.D. 1926, Harvard University; general practice, 1924-25; Assistant Professor of Law, University of California, 1926-27; Professor of Law, University of Southern California, 1927-30; Visiting Professor of Law; Columbia University, 1928-29; Yale University, second semester, 1935-36; University of California, summer 1927; Cornell University, summer 1928; University of Chicago, summer 1929; University of Southern California, summer 1930; Stanford University, summer 1935; University of North Carolina, summer 1936, 1948; Special Assistant to the Attorney General of the United States, 1938-39 and 1942-43; Chief of Wage-Hour Unit, Department of Justice 1939; Chief Consultant to the General Counsel, Board of Economic Warfare, 1942; Chief Legal Consultant, Office for Emergency Management, 1942-43; Solicitor, United States Department of Labor, 1943-45; Professor of Law, Duke University, since 1930.

**DALE F. STANSBURY, B.S., LL.B., J.S.D., *Professor of Law***

B.S. 1914, Valparaiso University; LL.B. 1917, Indiana University; J.S.D. 1929, Yale University; Sterling Research Fellow, Yale University, 1928-29; Deputy Attorney General of Indiana, 1913-24, 1928; private practice, 1925-27; Professor of Law, Mercer University, 1929-35; Dean and Professor of Law, Wake Forest College, 1935-44; Professor of Law, University of Tennessee, 1944-46; Duke University, since 1946.

**ROBERT RENBERT WILSON, A.B., A.M., Ph.D., LL.D., *Professor of Political Science and Lecturer in International Law***

A.B. 1918, Austin College; A.M. 1922, Princeton University; Ph.D. 1927, Harvard University; LL.D. 1940, Austin College; Carnegie Fellow in International Law, 1922-23, 1924-25; Member, Executive Council, American Society of International Law, 1929-32, 1936-39, 1944-47; Member, Advisory Committee, Harvard Research in International Law, since 1935; Member, Board of Editors, *American Journal of International Law*, since 1937; United States Department of State: Assistant, Treaty Division, 1931-32; Adviser on Commercial Treaties, 1944-46 (temporarily detailed to American Embassy in China, 1946); Consultant on Commercial Treaties, since 1946; Assistant Professor of Political Science, Duke University, 1925-27; Associate Professor of Political Science, Duke University, 1927-29; Professor of Political Science, Duke University, since 1929; Chairman, Department of Political Science, Duke University, 1934-1948; Lecturer in International Law (School of Law), since 1948.



## DUKE UNIVERSITY

## ASSISTANTS IN LEGAL AID CLINIC

S. C. BRAWLEY, JR.  
 SAMUEL FOX GANTT, A.B., LL.B.  
 C. FRANKLIN GRIFFIN, B.S., LL.B.  
 CARL A. HYLDURG, JR., A.B., LL.B.  
 ALTON J. KNIGHT, A.B., LL.B.

## VISITING LECTURERS IN LAW

BENJAMIN S. HORACK, A.B., LL.B.  
 L. P. MCLENDON, B.S., LL.B.

## LAW LIBRARY STAFF

MARIANNA LONG, A.B., B.S. in L.S., *Librarian*  
 KATHARINE B. DAY, B.S., *Assistant Librarian in Charge of Acquisitions*  
 MADELINE COPELAND, A.B., A.B. in L.S., *Cataloguer*

## PUBLICATIONS STAFF

MARY LOUISE LEWIS, *Editorial and Research Assistant*  
 FRANCES S. BARBEE, *Administrative Assistant*

## ADMINISTRATIVE STAFF

MYRTLE F. BURNS, *Registrar*  
 LINA W. WILLIAMSON, *Secretary to the Dean*

## FACULTY COMMITTEES

*Committee on Alumni Relations:* Mr. Bolich, Chairman; Messrs. Bryson and McClain.  
*Committee on Curriculum:* Mr. Maggs, Chairman; Messrs. Kramer, Latty, Lowndes, McClain, and Stansbury.  
*Committee on Graduate Study:* Mr. Latty, Chairman; Messrs. Bolich and Stansbury.  
*Committee on Pre-Legal Affairs:* Mr. Bradway, Chairman; Messrs. McClain and Lowndes.  
*Committee on Relations with Bench and Bar:* Mr. McDermott, Chairman; Messrs. Bryson and McClain.  
*Committee on Student Affairs:* Mr. Bradway, Chairman; Mr. Latty.  
*Law and Contemporary Problems Editorial Advisory Board:* Mr. Lowndes, Chairman; Messrs. Bradway, Latty, and Stansbury.

## LAW SCHOOL COMMITTEE OF THE BOARD OF TRUSTEES

B. S. WOMBLE, Winston-Salem, North Carolina  
 S. S. ALDERMAN, Washington, D. C.  
 R. G. CHERRY, Gastonia, North Carolina  
 N. A. COCKE, Charlotte, North Carolina  
 J. P. FRIZZELLE, Snow Hill, North Carolina

# Calendar 1951-1952



## 1951

- Sept. 19 Wednesday—Registration.  
Sept. 20 Thursday—Classes begin, 9 A.M.  
Nov. 22 Thursday—Thanksgiving day; a holiday.  
Dec. 20 Thursday—Christmas recess begins, 5 P.M.

## 1952

- Jan. 3 Thursday—Classes resumed, 9 A.M.  
Jan. 15 Tuesday—Fall semester classes end, 5 P.M.  
Jan. 17 Thursday—Mid-year examinations begin.  
Jan. 26 Saturday—Mid-year examinations end.  
Jan. 28 Monday—Spring semester classes begin, 9 A.M.  
March 22 Saturday—Spring vacation begins, 1 P.M.  
March 31 Monday—Classes resumed, 9 A.M.  
May 17 Saturday—Classes end, 1 P.M.  
May 19 Monday—Final examinations begin.  
May 28 Wednesday—Final examinations end.  
May 31 Saturday—Commencement begins.  
June 2 Monday—Graduating exercises.

# The School: Its Purposes and Methods



**B**UILT on the foundation of the School of Law of Trinity College, with its history of legal instruction running back to the middle of the past century, the Duke University School of Law was established in 1924. In 1930 the School was moved into its present building, the Faculty and library were greatly increased, and the activities of the School broadened. The School of Law is a member of the Association of American Law Schools and is on the "Approved List" of the American Bar Association. More than thirty states and eighty-three institutions of higher learning are represented in its student body.

The curriculum of the School of Law provides thorough preparation for the practice of law in any state; its graduates have been admitted to the bar in over forty states and the Territory of Hawaii. Opportunities for specialization in particular branches of the law are afforded.

In carrying out the trust imposed by the indenture establishing the Duke Endowment, the School of Law seeks to have the student acquire knowledge and comprehension not only of legal doctrine, but also of the judicial process and of the social, economic, and political problems with which law and lawyers must deal. The method of instruction employed compels analysis of judicial opinions and inquiry into the non-legal as well as the legal considerations which underlie them. In appropriate courses, special consideration is given to the work of the legislative and administrative agencies of government. In recognition of the increasing importance of the role of the lawyer in representing private interests before government agencies and in government service, an unusually broad program is offered in the public law field. Scope for creative student work is provided by seminar courses and supervised individual study and research.

Practical training is not left for the first years of practice. A carefully integrated series of courses is designed to give students actual experience in the work of lawyers. Legal research and writing courses and moot court work in the first and second years are followed in the third by seminar courses emphasizing legal planning and drafting and by practice courses and work in the Legal Aid Clinic. A student bar association affords a means whereby the student may gain acquaintance with the professional organizations through which a lawyer may and should contribute to the well-being of his profession and of society.

For details of the program of study see Program of Instruction, page 25. The separate courses are described on pages 29 through 34.

# Admission, Registration, and Fees



## *Admission*

### DIRECTIONS TO APPLICANTS FOR ADMISSION

**A**PPPLICATION must be made on the prescribed Law School application blank which will be sent upon request. No application can be finally passed upon until all required documents are on file. These documents are: (1) the application itself, to which a recently made personal photograph should be attached; (2) a complete transcript of record and evidence of graduation or right to honorable withdrawal from the institution from which credit is offered; (3) letters from (a) a responsible official of the college attended, (b) a responsible person in the applicant's home community, and (c) the applicant himself, in his own handwriting, containing a statement of his general activities, and intellectual interests with special reference to reasons for wishing to attend law school; (4) a report of the applicant's score on the Law School Admission Test described below.

The Law School seeks to select students who give promise of leadership in some of the various phases of professional activity. Applicants for admission and their sponsors are requested to keep this fact in mind.

The Law School Admission Test, referred to above, is administered by the Educational Testing Service and is participated in by a number of the leading law schools of the country. It is given four times a year at examination centers conveniently located throughout the United States. No special preparation for the test is necessary, since it is designed to measure aptitudes rather than knowledge of subject matter. The applicant's score on the test will be considered along with other data in passing upon his admission to the Law School. Application forms and information concerning the test should be procured by writing directly to the Educational Testing Service, P.O. Box 592, Princeton, New Jersey.

### TIMES OF ADMISSION

Beginning students may enter only at the opening of the Fall semester in any year. Students who have complete the first year of law study at this or any other law school approved by the Association of American Law Schools may enter at the beginning of any semester.

## REQUIREMENTS FOR ADMISSION

An application for admission as a candidate for the degree of Bachelor of Laws may be submitted by any person (1) who is a graduate of a college of approved standing, or (2) who has completed in a college of approved standing work equivalent in number of units to three-fourths of that required for graduation and whose college work in its entirety shows an average grade equal to that required for graduation, the requirement in each case being determined by the regulations of the college where the work was taken.

Special provisions for the admission of veterans, whereby military service may be substituted for one year of the three years of college required for admission, are stated below.

### VETERANS' ADMISSION REQUIREMENTS

Any person who enters the School prior to the Fall of 1952 and who served in active military or naval service on or after September 16, 1940, and prior to the termination of the war, and who has been discharged or released therefrom under conditions other than dishonorable and who either has served ninety days or more (exclusive of any period he was assigned for a course of education or training under the Army Specialized Training Program or the Navy College Training Program), or has been discharged or released from active service by reason of an actual service-incurred injury or disability, may substitute such term of service for one year of the three years of college required for admission. Academic credits will be recognized if gained through examinations on work of college grade pursued while in the military or naval service, if such work is given credit by an approved college; such credits, however, may not exceed one year of the required two years of college study.

The Duke University School of Law has been approved by the Veterans Administration for law study under the provisions of the Vocational Rehabilitation Act, Public Law 16, and the Servicemen's Readjustment Act of 1944, Public Law 346, often referred to as the "G.I. Bill of Rights." An office is maintained at the University for the handling of the interests of the many students studying under the supervision of the Veterans Administration.

### COMBINED COURSE

A number of colleges, upon application by their students, have permitted those who have completed three years of undergraduate work to enter the Law School of Duke University and upon the satisfactory completion of the first year of law school work to receive their Bachelor of Arts degree from such colleges. It is suggested that students desir-



ing to enter Duke University School of Law make inquiry of their proper college authorities regarding this point.

A student from an undergraduate college of Duke University who has completed therein three years of study, may apply to that college to enroll in a combined course wherein his first year of law study may be accepted toward the Bachelor of Arts degree, and, upon the completion of four additional semesters of law study, he will receive the Bachelor of Laws degree.

### ADMISSION TO ADVANCED STANDING

Any person who has complied with the requirements for admission set forth in this announcement prior to the commencement of his law study, who presents evidence of the satisfactory completion of at least one year of study at any law school which is a member of the Association of American Law Schools, and who is eligible for readmission to the law school from which he proposes to transfer, may be admitted to advanced standing, subject to such rules as would be applicable to students in this School having a comparable scholastic record. Provisional credit for courses so completed will be given, final credit being conditioned on the completion of at least one full year of law study in this School with an average at least five points above the passing grade. Adjustment of credit for work done in such other law schools may be made by the Dean or by vote of the Faculty.

### CANDIDATES FOR GRADUATE DEGREES

Applications for admission to graduate study should be addressed to the Dean of the Law School and should include transcripts of records of legal and pre-legal work. For the requirements for the graduate degrees, see pages 18 and 19.

### *Registration*

Registration must be completed on the first day of each semester. Instruction will begin in all classes on the following day. The applicant must obtain from the Dean of the Law School an admission card, indicating that he is entitled to register. Registration is conducted in the Law Building. All students, both old and new, are required to register at the beginning of each semester, at which time class schedules and course cards must be filled out and approved. Students who register in any semester at a date later than that prescribed are required to pay to the Treasurer of the University a penalty of \$5.00 for late registration unless excused therefrom. A student's registration for any semester is not complete until he has paid the tuition and fees for that semester. The \$5.00 penalty for late registration will be

imposed, therefore, unless the student has paid his tuition and fees by registration day.

### REGISTRATION FOR BAR EXAMINATION

Many states now require that a student, prior to or shortly after beginning the study of law, register with the board of bar examiners of the state if he intends to practice therein. Each student should write to the secretary of the board of bar examiners of the state in which he plans to practice and ascertain if that state makes this requirement.

### CONDUCT OF STUDENTS

All students are admitted subject to the rules of the University and of the School of Law, and continuance in the School is conditioned upon the observance of such rules.

The University expects of its students loyal and hearty co-operation in developing and maintaining high standards of conduct as well as of scholarship. The University, therefore, reserves the right, and matriculation by the student is a concession of this right, to compel the withdrawal of any student whose conduct at any time is not satisfactory to the University.

### *Fees and Expenses*

Tuition fees are due at the beginning of each semester. The tuition fee is \$175.00 a semester. In addition, a general fee of \$50.00 per semester is required in lieu of separate fees for matriculation, medical service, and the like.

The admission of an applicant is not final until he deposits the sum of \$25.00 with the Treasurer of the University. This deposit will not be returned. It will be credited to the account of the student or, if the student is entitled to the benefits of the Servicemen's Readjustment Act or the Vocational Rehabilitation Act, it will be refunded upon his matriculation.

An athletic fee of \$5.00, plus any Federal taxes that might be imposed, payable at the beginning of each Fall and Spring semester, is optional. Payment of the athletic fee entitles the student to admission to all athletic events on the campus.

The payment of the general fee entitles the student to full medical and surgical care, with the exceptions noted below. This service is under the direction of the University Physician with the co-operation of the staff of Duke Hospital. It includes hospitalization, medical and surgical care, drugs, dressings, X-ray studies, and ward nursing. A charge for board is made at the same rate as in the University dining

halls. Refraction of eyes, treatment of teeth and of all chronic conditions, such as the removal of diseased tonsils, are not included in this service. The cost of any necessary braces and orthopedic appliances, as well as of special nursing, must be borne by the student.

Due to rising costs it may be necessary to consider some readjustment of charges. In the event of an adjustment applicants will be notified.

### SCHOLARSHIPS AND LOAN FUNDS

Scholarships covering tuition (\$350) are available to a limited number of first-year students, graduates of approved American universities and colleges, who are in need of such assistance. Applicants must have made excellent records in their college work and must show unusual promise of success in the study of law.

Applications for scholarships should be presented to the Dean of the Law School, together with a transcript of college work and letters of recommendation from responsible persons, certifying to the character and fitness of the applicant.

Other scholarships are awarded, as funds may permit, to high ranking students who have spent a year or more at the Law School. There are also a number of positions as assistants in the Law Library and as research assistants which are open to students, particularly in their second or third year, who do not receive other aids from the University.

The University administers certain endowed loan funds for the benefit of students who are not able to meet their expenses, for the purpose of helping worthy students who have established a satisfactory record at the School to continue their education.

Two funds have been provided out of which small loans may be made to tide students over temporary financial emergencies arising during the course of the year. One of these was supplied by the Law School Guild and is limited as to amount and duration of loan. The other is due to the generosity of Mr. P. Frank Hanes of the Winston-Salem bar and is limited to the needs of selected students. These funds are administered by a committee of the Faculty.

### GRADUATE LAW FELLOWSHIPS

Graduate fellowships in limited amounts are available. To be eligible for these grants, applicants must have completed with distinction the work required for the first degree in law at this Law School or some other school approved by the Association of American Law Schools, and must have been admitted to candidacy for the LL.M. or J.S.D. degree. Preference will be given to students who plan to make law teaching a career. All applications should be addressed to the Dean of the School of Law, Duke University. Fellowships will be awarded by the law faculty on recommendation of the Committee on Graduate Study.

## DINING SERVICE

Food service is cafeteria style. The cost of meals approximates \$1.50 to \$2.00 per day, depending on the need and taste of the individual. The dining facilities on the West Campus include three cafeterias with multiple-choice menus and the Oak Room where full meals and a la carte items are served.

## THE GRADUATE DORMITORY AND THE "LAW CABINS"

Furnished double rooms may be secured in the graduate dormitory on the West Campus at \$62.50 per person per semester. A few single rooms are available at \$87.50 per semester.

A group of log cabins, a part of the dormitory system, especially designed as a study center for law students, is located in the Duke Forest about five minutes' walk from the Law Building. These cabins, five in number, including a large cabin for use as a social hall, house thirty-two students. All rooms in the law cabins are furnished double rooms and may be secured at \$50.00 per person per semester.

These charges in each case include heat, light, water, and janitorial service but do not include pillows or bed clothing of any kind.

Rooms are reserved only for applicants who have been officially accepted by the University, upon application to the Director in the Business Division, Duke Station, Durham, North Carolina. A reservation fee of \$25.00 must accompany the application for a room. The fee is deducted from the room rental charge at the time of registration for the semester; it is not refunded unless application for the refund is made sixty days prior to the registration date of the semester.

Each student is expected to supply necessary sheets, blankets, pillows, rugs, and curtains. Furniture, beds and mattresses (39" x 74"), tables, chairs, dressers, mirrors, and window shades are furnished by the University.

Law students are advised to make early application, since assignment of rooms is made considerably in advance of the beginning of each semester. The applicant should state that he has been accepted for admission to the School of Law. All dormitory or cabin rooms are to be occupied under the rules and regulations established by the University. Law students are not required to live in the University dormitories.

## LAWS REGARDING PAYMENTS

The Executive Committee of Duke University has enacted the following regulations which govern the payment of all fees due the University:

1. The President and the Treasurer of the University have no authority to suspend or in any way alter these regulations.

2. Any student who has failed to pay his bills on the dates advertised in the catalogue is denied the right to attend classes until his account is settled in full; subsequent withdrawal does not entitle a student to a refund.

3. No student is considered by the Faculty as an applicant for graduation until he has settled with the Treasurer for all his indebtedness to the University.

- 4. No student who has not settled all his bills with the Treasurer of the University is allowed to stand the midyear or final examinations of the academic year.

When a student wishes his bills sent to his parents or guardian, the student or his parent or guardian must so notify the Treasurer of the University in writing in due time, but this in no way releases the student from liability to established penalties, if his bills are not paid on the dates advertised.

---

Further information will be sent upon request. Address  
THE DEAN OF THE SCHOOL OF LAW  
DUKE UNIVERSITY  
Durham, North Carolina



# Bachelor of Laws Degree



UPON favorable recommendation of the Faculty, the degree of Bachelor of Laws will be conferred on students who shall have successfully completed six semesters' study of law, the last two semesters of work immediately preceding the granting of such degree having been completed in this School.

A student shall be deemed to have completed successfully six semesters' study of law if during this period he has

(1) secured a passing grade in courses aggregating seventy-eight semester hours;

(2) secured in every required course a grade not requiring repetition thereof; and

(3) secured a weighted average at least five points above passing in all work taken other than first-year courses, or, if the grade in such work is lower than that above specified, an average grade of five points above passing in all work taken.

Students who have spent only their last two semesters of study in residence in this School must have received a weighted average at least five points above passing for that year.

## MINIMUM AND MAXIMUM STUDENT LOADS

No regular student is permitted to take less than ten course hours per semester. No first-year student is permitted to take courses in excess of the first-year program.

Second- and third-year students are not permitted to take for credit more than fifteen course hours per semester; nor to audit and take for credit more than sixteen course hours per semester. In exceptional cases, students may petition the Faculty for permission to take more or less than the prescribed maximum or minimum loads.

## STANDARDS OF SCHOLARSHIP

GRADES.—The final grades in each course are given in numerical terms which are equivalent to letter grades according to the following scale: 80 to 100, A; 70-79, B; 55-69, C; 50-54, D; 0-49, F.

A grade of 50 is necessary for passing a course. Where a grade below 50 is given a student in any required course, the course must be repeated if the instructor reports the grade with the notation "must repeat." When a student is required by the instructor to repeat a

course which he has failed, the grade given after such repetition supersedes the previous grade in the course.

**ELIGIBILITY TO CONTINUE LAW STUDY.**—Any student who at the end of his first year or at the end of any subsequent semester, has an average grade lower than 50 on all the work then taken is ineligible to continue his work in the School. Any other student (1) whose average final grade at the end of his first semester is below 50, or (2) whose average grade at the end of any subsequent semester on all the work then taken is below 55, or (3) who in any single semester or in any single year receives failure grades in courses totaling eight or more semester hours, may at any time be declared by the Dean ineligible to continue.

**NOTIFICATION OF UNSATISFACTORY SCHOLASTIC STANDING.**—Every student subject to the provisions of the second sentence of the paragraph above, who has not been declared ineligible to continue his work in the School will be given a formal, written notice by the Dean's Office. This notice will set forth his average grade or grades and inform him (1) that he will be subject for the ensuing year to the special supervision of the Daen who may order his dismissal from the School in the event of his failure to maintain a satisfactory scholastic standard, and (2) that he will be ineligible to receive a degree unless his work meets the scholastic requirements for graduation which will be set forth in full in such notice.

Every other student whose average final grade at the end of any semester on the work of that semester, or on all work then taken, does not exceed the minimum average grade required for graduation by more than two points will be given a notice similar to that provided for above.

# Graduate Work in Law



## *Objectives of the Graduate Study Program*

THE graduate program of the School of Law is framed with a view to the encouragement and recognition of legal scholarship. It is addressed to the needs of those who have objectives consistent with the purposes of graduate legal education. It provides training for the qualified student who aspires to a teaching career, or who wishes to become proficient in a special field of the law, to do serious legal research, to prepare himself for a public law practice in or out of government, or to acquire a broader and deeper legal education than the undergraduate curriculum offers.

## *Master of Laws*

### ADMISSION TO CANDIDACY FOR THE DEGREE OF MASTER OF LAWS

Any person who has received the first degree in law from a law school qualified for membership in the Association of American Law Schools may be admitted as a candidate for the degree of Master of Laws, provided he satisfies the Committee on Graduate Study that his objective in desiring to do graduate work in law is consistent with the purposes for which the program is offered, and provided he demonstrates to the Committee, on the basis of his law school record, his capacity to take and profit by graduate work in law. In exceptional cases an applicant who does not meet the above requirements may, on vote of the Faculty, be admitted to candidacy for this degree if he is able to demonstrate that he is specially qualified, as by reason of practice or teaching. Normally the applicant will be required to show a level of scholarship appreciably higher than that required for the first degree in law at the institution from which he received that degree. An exceptionally high record in law school and in the graduate study program is expected of those who aspire to a teaching career. It should be emphasized that the graduate study program is designed for graduates with a definite objective, not for those who seek to pursue further law study simply from disorientation.

## REQUIREMENTS FOR THE DEGREE OF MASTER OF LAWS

The degree of Master of Laws is reserved for students who, having demonstrated their capacity for graduate work in law, maintain a level of scholarship substantially higher than that required for the degree of Bachelor of Laws in a course of study which involves distinctively graduate work.

The candidate for this degree is required to complete a course of study comprising not less than twenty nor more than twenty-six semester hours, or approved research equivalent thereto. Two full semesters are required for the completion of this program. A candidate for this degree is required to include in his course of study at least two of the following courses: International Law, Jurisprudence, and Legal History. In addition to the minimum requirement of twenty semester hours, the candidate is required to submit an essay representing substantial research on a legal subject. This essay is to be prepared under the supervision of the instructor in charge of the field in which the research is done. The candidate will find it helpful to have formulated a project of research, or alternative projects, before his admission to graduate study.

The candidate's course of study will be selected, ordinarily, from the following list of courses: Public Regulation of Business Seminar, Jurisprudence, Conflict of Laws, International Law, Legal History, Banking, Corporate Planning, Debtors' Estates, Insurance, Corporate Reorganization, Credit and Insolvency, Family Law, Family Law Seminar, Future Interests, Tax and Estate Planning, Labor Relations, Labor Standards, Labor Law Seminar, Federal Taxation I, Federal Taxation II, and State Taxation. This program of study is not inflexible. In appropriate cases the candidate will be encouraged to take related work in other departments of the University. Other courses of comparable content may be substituted for those listed. In special circumstances, credit not in excess of two hours per semester may be arranged for special, supervised research projects.

### *Doctor of Juridical Science*

#### ADMISSION TO CANDIDACY FOR THE DEGREE OF DOCTOR OF JURIDICAL SCIENCE

Any person holding the degree of Master of Laws from this or any other law school which is qualified for membership in the Association of American Law Schools may, on vote of the Faculty, be admitted to candidacy for the degree of Doctor of Juridical Science, provided he completed the work for the Master's degree with distinction.

## REQUIREMENTS FOR THE DEGREE OF DOCTOR OF JURIDICAL SCIENCE

Upon favorable recommendation of the Faculty, the degree of Doctor of Juridical Science will be conferred on students admitted to candidacy for that degree who complete and submit a monograph or series of essays suitable for publication and deemed by the Faculty to be of distinguished character. At least one academic year, and, in the absence of an extension granted by the Faculty, not more than three years, must elapse between the award of the Master's degree and the award of the degree of Doctor of Juridical Science. Students who have received the degree of Master of Laws from another law school must spend at least two full semesters engaged in research at this School, and in addition may be required to complete a course of study prescribed by the Committee on Graduate Study. The monograph or series of essays required may be based upon, or be an extension of, the essay required for the Master's degree, provided substantial additional research is represented.

### *Post-Graduate and Refresher Courses*

The School of Law provides instruction for students not meeting the requirements for admission to candidacy for graduate degrees who desire refresher courses or who desire simply to complete a fourth year of law school work. The successful completion of the courses taken by such students may be evidenced by certificate of the Dean.



# Facilities and Activities



## *The Law School Building and Its Facilities*

THE Law Building, like all other structures on the main campus of Duke University, is in Tudor Gothic style of colorful Cambrian stone from the Duke University quarries. It was occupied by the School of Law for the first time in September, 1930. In it are classrooms, seminar rooms, offices for Faculty and Staff, quarters for the Legal Aid Clinic and for the Duke Bar Association, a courtroom equipped for trial court and appellate court sessions, and the Law Library. For a description of dormitory accommodations, see page 14.

### THE LAW LIBRARY

The Law Library, containing a collection of over ninety thousand volumes, is the largest law school collection in the South. It consists of American and English statutory and case law; a collection of Continental law materials; treatises, digests, encyclopedias; the various selected case series; a comprehensive collection of legal periodicals; and publications in the fields of history, economics, government, and other social sciences, supplemental to the strictly legal materials. The Library receives every current legal periodical of general interest printed in the English language.

There are several thousand additional volumes of a legal nature in the main University library building, immediately adjoining the Law School, as well as the general collection of over a million volumes, to all of which the law students and Faculty have convenient access.

The Law Library is administered by a professionally trained staff and is open to the public daily throughout the year and in the evenings, as well, whenever the Law School is in session.

### THE LEGAL AID CLINIC

A Legal Aid Clinic was organized at the School of Law in 1931 under the direction of Professor John S. Bradway. The purpose of the Clinic is threefold: to give the student experience in handling actual cases; to develop creative skills, techniques, and mental habits; to encourage a sense of responsibility to client, court, profession, and community. The student is obliged to synthesize his knowledge in applying it to concrete situations which may often cut across course boundaries. He is introduced to the technique of fact gathering, the

steps in a legal plan of campaign, the handling of clients, the management of a law office. A series of exercises is conducted in legal research and briefing, leading in the first semester to the writing by each student of a trial brief and in the second semester an appellate brief for a lawyer in active practice. Classroom work involves laboratory exercises in preparation for the handling of actual cases. The law practice in the Clinic is of a sort calculated to stress the ethical responsibilities of the lawyer and the social implications of his work. Instruction in the handling of the actual cases is individualized. Training in the art of interprofessional co-operation is provided through contacts between the Clinic and various agencies of social welfare in North Carolina.

The Legal Aid Clinic is in effect an active law office offering the student, under supervision, experience in interviewing actual clients, investigation of facts, preparing cases for adjustment or for trial in court, writing legal documents, briefing, and other tasks familiar to the practicing attorney. Approximately four hundred persons a year apply for services of the Clinic. Only those applicants who are unable to pay counsel fees, and only those cases where there is no opportunity for a contingent fee are accepted.

The activities of the Clinic are centered in a suite of offices in the Law School building, and in an interviewing office in the business center of Durham. In addition to the Director, a staff of five members of the North Carolina State Bar assists in the educational and supervisory activities of the Clinic and in representing its clients in court proceedings.

## *Publications*

### LAW AND CONTEMPORARY PROBLEMS

The School of Law publishes a quarterly, *Law and Contemporary Problems*, under the editorship of Professors Robert Kramer and Robinson O. Everett. This periodical, now in its sixteenth volume, presents in each issue a symposium on a problem of current importance, in which the interrelated social and economic, as well as legal, factors are discussed by writers of competence in these respective fields. Where student research may contribute to the understanding of the legal aspects of such problems, student writings are accepted for publication.

The circulation of *Law and Contemporary Problems* extends not only to members of the legal profession and law libraries throughout the country, but also to industrial and financial concerns, governmental agencies, and public and general university libraries. Indi-

vidual issues are not infrequently used as materials for study in university courses.

### JOURNAL OF LEGAL EDUCATION

The *Journal of Legal Education*, a quarterly, is also edited at the School of Law under the direction of Professors Robert Kramer and Robinson O. Everett. The publication serves as the organ for the Association of American Law Schools, providing a clearing house for ideas and professional studies in the constantly expanding field of legal education. The editorial policy of the *Journal of Legal Education* is determined by an editorial board named by the Association, assisted by an advisory committee consisting of prominent legal educators and practicing attorneys.

### DUKE BAR JOURNAL

The School inaugurated in 1950-1951 the publication of the *Duke Bar Journal*, published semi-annually, the material in which is written entirely by law students under faculty supervision. This *Journal* affords an unusually fine medium for student training in effective legal writing. Professor Robinson Everett has served as faculty supervisor during 1950-1951.

## *Organizations and Activities*

### THE DUKE BAR ASSOCIATION

The Duke Bar Association was established in the spring of 1931. It is open to all the students of the Law School and is organized along the lines of the American Bar Association. Its purpose is to introduce the student to the problems considered by the bar in professional organizations and to develop professional consciousness and responsibility. A Faculty Committee on Student Affairs serves as general adviser to the student officers.

### MOOT COURTS

A program of student Moot Court arguments is conducted under the supervision of the Faculty as a part of the courses in Research and Writing in which all students are required to participate.

### WILLIS SMITH PRIZE

Mr. Willis Smith, a member of the Raleigh bar and of the United States Senate and Chairman of the Board of Trustees of Duke University, awards annually to that member of the graduating class of the Law School who has maintained the highest scholastic average

during the entire three years of law school work, a prize consisting of a set of books selected personally by Mr. Smith each year for that purpose. To qualify for this prize the student must have made an outstanding record through his law school course.

### JAMES F. BYRNES SENATE PRIZE

Delta Theta Phi Foundation, Inc., through the James F. Byrnes Senate, awards each year to that member of the first-year class of the Law School who has completed the work of the first year with the highest scholastic average during that year a cash prize of fifty dollars.

### ORDER OF THE COIF

A chapter of the Order of the Coif, national legal scholarship society, has been established at Duke University School of Law. Its purpose is "to foster a spirit of careful study and to mark in a fitting manner those who have attained a high grade of scholarship." Election is restricted to the ten per cent of the graduating class who have attained the highest rank in their law school work.

### LEGAL FRATERNITIES

Three of the largest national legal fraternities maintain active chapters at the School of Law. The Charles Evans Hughes Inn of Phi Delta Phi International Legal Fraternity was founded at the School of Law in 1931. The Wiley Rutledge Chapter of Phi Alpha Delta Law Fraternity was founded at the School in 1946. In 1947 the James F. Byrnes Senate of Delta Theta Phi Law Fraternity was installed at the School. All three fraternities seek to further professional standards. Students may be elected to membership at any time following their first full semester of law study. During the school year the fraternities sponsor separate programs of luncheons featuring prominent local speakers from the profession, an annual address by an attorney of national prominence, and occasional social functions.

### RECREATIONAL FACILITIES

The University is located about two miles from the business district of Durham on wooded hills constituting part of the five-thousand-acre Duke Forest, which is maintained by the School of Forestry. Within a short distance from the campus are facilities for golf, horseback riding, and woodland hiking. Students of the Law School are entitled to the use of the University gymnasium, tennis courts, swimming pool, and similar privileges without cost. Motion pictures are shown in Page Auditorium twice a week, and concert programs, recitals, lectures, and plays are presented frequently.

# Program of Instruction



THE program of instruction of the School of Law has been thoroughly revised as a result of studies made by the Faculty. The curriculum had become overcrowded. For years new courses have been added at this and other schools as new fields of law have become important; old courses have been retained. Students who wished to specialize in particular fields often found it necessary to omit some of the older, more fundamental courses. Insufficient attention had been given to legal writing, the drafting of legal instruments, and legal planning.

The newly adopted curriculum is designed to insure that students may prepare to specialize in practice without foregoing any part of the basic legal education required for general practice and desirable for all specialists. Courses have been combined; duplications in courses have been eliminated. The larger part of students' third year has been opened for studies of specialties. New courses and seminars have been added, especially in the third year in which teaching methods will be different from those used in the older courses. In these courses and seminars legal writing and drafting and legal planning will be emphasized.

The courses offered are listed below. They are grouped under three headings: First-Year Program; Recommended Second-Year Program, and Third-Year Courses. At page 29 the individual courses are described; in that section of the Bulletin they are grouped under the following headings: Business Courses; Property Courses; Public Law Courses; General Courses; Procedure and Practice Courses.

THE FIRST-YEAR PROGRAM is prescribed. It includes basic courses in the fields of contracts, business associations, property (including sales and other chattel transactions), and torts. These courses serve also to acquaint the student with the nature of the judicial process (which is stressed in Chattel Transactions), the court system and court procedure (stressed in Torts), and legal history (stressed in the second property course and in other courses). In the field of public law, legislation and the legislative process are studied in the first semester; there follows in the second semester a course in the fundamentals of criminal law and its administration. A course in research and writing (which is continued throughout the second year), after consideration of how the law is found in law books, trains students in writing memoranda of law and legal arguments and in drafting legal documents; the course emphasizes, for each student, the



law of the state in which he intends to practice, and introduces students to the art of legal planning. It includes the preparation of briefs and the arguing of moot court cases.

THE RECOMMENDED SECOND-YEAR PROGRAM comprises nearly all the other basic courses which all students need regardless of what kind of law practice they plan to enter and the courses prerequisite to third-year work in special fields and in legal planning. Third-year courses may be substituted for courses in this program with the consent of the instructors thereof and of the Dean. The research and writing course continues throughout the year. The basic work in property and business associations is completed. In the field of business transactions, the students study negotiable instruments and credit. A course in federal taxation, basic to advanced third-year work for specialists, adequately covers the subject for students not planning to specialize in it. Legal and equitable remedies, and court procedure in civil cases, are studied in the course in remedies. Students continue their study of public law in courses in constitutional and administrative law.

THE THIRD-YEAR COURSES (of which an aggregate of 10 to 15 hours each semester is to be selected by each student) are designed to emphasize legal planning and drafting and to enable students to equip themselves to specialize in particular fields. The faculty recommends that all students complete their basic legal education by taking courses in evidence and legal ethics. There are also fundamental courses in legal history and jurisprudence and in conflict of laws and international law. The rest of the third-year courses are in specialties; they are grouped below under the headings (1) business (including *inter alia* advanced corporation law), (2) estates, family, and property, (3) procedure, practice, and local law, and (4) public law (including *inter alia* labor law and taxation). A number of these specialty courses (those preceded by asterisks in the list below) emphasize legal planning and drafting. Each student is required to include two of these courses in his third-year program; enrollment in each is limited.

### *The First-Year Program*

	SEMESTER HOURS	
	Fall	Spring
Chattel Transactions .....	2	2
Contracts .....	3	4
Research and Writing I .....	1	1
Torts .....	3	3
Criminal Law .....	3	
Legislation .....	3	
Business Associations I* [Agency, Partnership, Introduction to Corporations] .....		2
Estates in Land .....		3
	<hr/> 15	<hr/> 15

## *The Recommended Second-Year Program*

	SEMESTER HOURS	
	Fall	Spring
Research and Writing II [Required] .....	1	1
Administrative Law .....	3	
Business Associations II [Including Accounting] .....	3	
Conveyancing .....	3	
Negotiable Instruments .....	3	
Civil Procedure I .....		3
Constitutional Law [Including Federal Jurisdiction] .....		4
Credit Transactions .....		3
Federal Taxation I .....		3
	13	14

## *The Third-Year Courses*

Students are to select courses aggregating 10 to 15 hours each semester. Every student must select two of the starred courses listed under "B. Specialties." These courses emphasize legal planning and drafting. Enrollment in each of them except Legal Aid Clinic is limited to 15. Legal Aid Clinic counts as a single starred course, though it is a year course. No student may take more than two starred courses in the same semester without the consent of the Dean and of the instructors in the starred courses involved.

### A. ADVANCED COURSES.

Conflict of Laws .....	3	
International Law .....		3
Jurisprudence .....		3
Legal History .....		2

### B. SPECIALTIES.

#### I. Business. (See also "IV. Public Law.")

*Corporate Planning .....	2	
Debtors' Estates .....	2	
Insurance (Not Offered 1951-1952) .....	2	
*Contract Planning and Drafting .....		1
*Corporate Reorganization .....		2

#### II. Estates, Family, Property

Family Law .....	2	
Future Interests .....	3	
Trusts .....	3	
Family Law Seminar .....		2
*Tax and Estate Planning (Also listed under		
"IV. Public Law.") .....		2
Wills and Administration of Estates .....		3

#### III. Procedure, Practice and Local Law.

*Legal Aid Clinic .....	2	2
*Case Studies .....	1	
North Carolina Statutes and Decisions .....	2	
Civil Procedure II .....		3
Evidence .....		4
Legal Ethics .....		1
North Carolina Practice .....		2

## IV. Public Law.

Advanced Criminal Law (Not Offered 1951-1952) .....	2
Federal Taxation II .....	3
Labor Relations [National Labor Relations Act; collective bargaining, strikes, etc.] .....	3
Municipal Corporations (Not Offered 1951-1952) .....	2
State Taxation (Not Offered 1951-1952) .....	2
*Constitutional Law and Federal Courts Seminar (Not Offered 1951-1952) .....	2
*Labor Law Seminar [Negotiations; contract clauses; grievances; arbitration, etc.] .....	2
Labor Standards [Workmen's Compensation, Fair Labor Standards Act, etc.] .....	2
*Public Regulation of Business Seminar .....	3
*Tax and Estate Planning (Also listed under "II. Estate, Family, Property.") .....	2

# Description of Courses



## *Business Courses*

**BUSINESS ASSOCIATION I.** Legal principles concerning association in business by agency, partnership, other unincorporated forms and corporations. Creation, form and nature of agency, partnership and corporation, corporate existence (de facto corporations, corporate entity and its limitations), powers, duties, liabilities and compensation of agents, partners, officers and directors, risks in conduct of business by representatives (vicarious liability in tort, authority to contract), imputation of notice and knowledge, scope of enterprise (*ultra vires*), revocation and termination of authority, ratification, undisclosed business associates, stability of the associational relationship. The purpose of this course is to grasp basic principles of Agency and Partnership and elementary doctrines of corporation law as a foundation for the advanced corporation course (Business Associations II). Two hours a week second semester.

MR. LATTY

**BUSINESS ASSOCIATIONS II.** Promoters, subscription to and issue of shares, stock structure and corporate capital, dividends, preferred stock, bonds, capital increases and reduction, corporate re-acquisition of own stock, elementary principles of corporate accounting, public issue of securities, stock transfers, fundamental corporate changes (recapitalization, sale, merger and consolidation, dissolution), stockholders' suits, and certain principles concerning management and operation not studied in Business Associations I. Three hours a week first semester.

MR. LATTY

**CONTRACTS.** The formation and legal operation of contracts in general, with attention to problems of drafting and counseling as well as of litigation and extrajudicial settlement. Legal and equitable remedies in contract cases, including damages, specific performance, and restitutionary remedies, and important procedural devices incident to such remedies. Three hours a week first semester, four hours a week second semester.

MR. STANSBURY

**CONTRACT PLANNING AND DRAFTING.** The work will consist of the formulation and drafting of contractual instruments involved in common business transactions. One hour a week second semester.

MR. STANSBURY

**CORPORATE PLANNING.** The student is given hypothetical corporate problems (perhaps taken from the practicing lawyer's desk) on a client's proposed course of action; each problem is designed to require the student to grasp the business situation and goals involved, analyze for pertinent legal principles, plan the transaction to avoid legal and business (including taxation) pitfalls, plan the requisite steps to consummate the desired transaction, draft the appropriate papers, and present his research. Two hours a week first semester.

MR. LATTY

**CORPORATE REORGANIZATION.** Reorganization of financially embarrassed corporations in equity proceedings, under state statutes, and under the Bankruptcy Act, Chapters X and XI. Comparison with simplifications of public utility holding company systems under the Holding Company Act of 1935. Recapitalization of solvent corporations. Work of the semester will be devoted primarily to advanced research projects involving planning, drafting, and writing, rather than to coverage of an entire syllabus by all students. Two hours a week second semester.

MESSRS. LATTY AND EVERETT

**CREDIT TRANSACTIONS.** Contracts of accommodation, including those on bills and notes, contracts of suretyship and guaranty, letters of credit. Mortgages

and security interests in real property, chattel mortgages, pledges, trust receipts, conditional sales and consignment contracts. Three hours a week second semester.

MR. EVERETT

**DEBTORS' ESTATES.** Rights of creditor and debtor in the administration of insolvent estates in bankruptcy, with comparisons to alternative methods of administration; compositions, assignments for the benefit of creditors, receiverships, and special proceedings for certain classes of debtors. An introduction to proceedings for the rehabilitation of debtors under the Bankruptcy Act, including arrangements and reorganizations. Two hours a week first semester.

MR. EVERETT

**INSURANCE.** The nature of "insurance"; state supervision and control; types of insurance organization; the legal requirement of insurable interest; interests of others than the named insured; the measure of indemnity and subrogation; the beneficiary's interest in life insurance; the insured event and excepted causes; warranties, representations and concealment; the making of insurance contracts; waiver, estoppel and election. Two hours a week first semester. (Not offered 1951-1952.)

MR. McDERMOTT

**NEGOTIABLE INSTRUMENTS.** Negotiability of bills and notes; execution of negotiable instruments; obligations of parties; formal requisites of negotiability; transfer and negotiation; requisites of holding in due course; equities and defenses; discharge. Introduction to legal relations between bank and customer. Three hours a week first semester.

MR. EVERETT

**PUBLIC REGULATION OF BUSINESS SEMINAR.** See Public Law Courses, page 32 for description. Three hours a week second semester.

MR. LIVENGOOD AND MEMBERS OF THE ECONOMICS DEPARTMENT STAFF

## *Property Courses*

**CHATTEL TRANSACTIONS.** The course covers most of the topics generally treated under the heading of Personal Property, Bailment and Sales; application of the concepts of possession and title in the law of personal property; the bailment relationship; artisan's lien; transfer of chattels by gift, sale and miscellaneous inter vivos transactions. In Sales, the emphasis is on remedies and performance. Special attention is given to the judicial process and technique. Problems of chattel mortgages, pledges and sales financing are considered only incidentally, being reserved for the course in Credit Transactions. Two hours a week throughout the year.

MR. LATTY

**CONVEYANCING.** Form and execution of deeds; description in deeds; aspects of contracts for the sale of land; rents, licenses, easements and profits; covenants and agreements running with the land at law and in equity; estoppel by deed; recording and title registration. Three hours a week first semester.

MR. BOLICH

**ESTATES IN LAND.** Historical introduction to real property with a detailed consideration of the modern law of possessory estates, including the fee simple, the fee tail, the life estate, the estate for years, and other non-freeholds; concurrent ownership; incidents of possessory ownership relative to water, lateral and subjacent support and air. Three hours a week second semester.

MR. BOLICH

**FUTURE INTERESTS.** Future interests in real and personal property; reversions; vested and contingent remainders; executory interests; rights of entry; possibilities of reverter, gifts to classes; powers; perpetuities; construction of wills and deeds as affecting the validity and characteristics of the interests created thereby. Three hours a week first semester.

MR. BOLICH

**TAX AND ESTATE PLANNING.** Seminar devoted to problems and techniques of tax and estate planning. Federal Taxation I and II and Future Interests are prerequisites to enrollment in the seminar. Two hours a week second semester.

MESSRS. BOLICH AND LOWNDES



**TRUSTS.** The nature, creation and elements of a trust; transfer of the beneficiary's interest; administration of trusts; termination and modification of trusts; charitable trusts; liabilities to third persons; and liabilities of third persons. Three hours a week first semester. MR. LIVENGOOD

**WILLS AND ADMINISTRATION OF ESTATES.** Descent and distribution: property rights of surviving spouse; children and descendants; ancestors and collaterals; effect of claimant's misconduct. Making and revoking wills; testamentary capacity; execution of wills; holographic and special types; integration; testamentary character and intent; revocation; operation of legacies and devises. Probate and administration: grant of administration; probate and contest of wills; assets; contracts, sales and investments by personal representative; claims; settlement of the estate. Three hours a week second semester. MR. McDERMOTT

## *Public Law Courses*

**ADMINISTRATIVE LAW.** The formulation of statutory schemes of administrative regulation: the organization of administrative agencies; the determination, promulgation and enforcement of administrative programs; the respective spheres of administrative and judicial responsibility; judicial control over administrative action. Practice and procedure before administrative agencies: informal conferences and negotiations; formal hearings; constitutional limitations. Three hours a week first semester. MR. KRAMER

**CONSTITUTIONAL LAW.** Judicial protection against arbitrary governmental action; the history of the concept of a "higher law"; the constitutional clauses relied upon. The organization and jurisdiction of the federal courts; when and how judicial review can be invoked; limitations on governmental power with respect to economic matters, civil liberties and criminal and civil procedure. The powers of Congress, express and implied; limitations on State governmental powers resulting from the existence and from the exercise of Congressional powers. The constitutional question involved in administrative law, conflict of laws, intergovernmental tax immunities, jurisdiction to tax, and state taxation of interstate commerce are covered more fully in other courses. Four hours a week second semester. MR. MAGGS

**CONSTITUTIONAL LAW AND FEDERAL COURTS SEMINAR.** Advanced study of current Supreme Court cases and of particular fields in constitutional law and history and federal court organization. Two hours a week second semester. (Not offered 1951-1952.) MR. MAGGS

**CRIMINAL LAW.** An introductory study of the law of crimes and the administration of criminal justice; analysis of the criminal act and the mental element in crime; consideration of specific offenses as defined by statute and the common law; discussion of typical defenses in relation to specific crimes; elementary criminal procedure; study of the Anglo-American penal system. Three hours a week first semester. MR. McCLAIN

**CRIMINAL LAW AND PROCEDURE (ADVANCED).** A seminar approach to the preparation and trial of criminal cases; theories of crime and punishment; modern trends in the definition and punishment of crimes; trial techniques. Two hours a week first semester. (Not offered 1951-1952.)

**FEDERAL TAXATION I.** An introduction to the federal income, estate and gift taxes, with particular emphasis on the federal income tax. The course is designed as a final course for students who do not intend to specialize in tax practice and as an introductory course for those who do. Three hours a week second semester. MR. LOWNDES

**FEDERAL TAXATION II.** Advanced courses in federal taxation and federal tax practice. Problems in income tax practice and procedure, followed by a detailed study of the federal estate and gift taxes and the relation of the federal income, estate and gift taxes. Three hours a week first semester. MR. LOWNDES

**INTERNATIONAL LAW.** A survey of public international law of peace, as evidenced especially in decisions of national and of international courts; the drafting and interpretation of treaties; the nature and handling of international claims; the organization and jurisdiction of international tribunals, with special reference to the International Court of Justice; developments with respect to the codification of the law. Three hours a week second semester. MR. WILSON

**LABOR LAW SEMINAR.** An intensive study of labor law problems, with emphasis on collective bargaining techniques, drafting union contract clauses, grievance and arbitration procedures, specific applications of the National Labor Relations Act, and some legal and economic aspects of the management-labor relationship. Prerequisite: Labor Relations. Two hours a week second semester. MR. LIVENGOD

**LABOR RELATIONS.** A study of the law relating to collective bargaining and concerted labor activities, including the National Labor Relations Act and related legislation, state and federal anti-injunction statutes, the legal aspects of strikes, boycotts and picketing, the law of labor contracts and labor unions. Three hours a week first semester. MR. LIVENGOD

**LABOR STANDARDS.** A consideration of the governmental regulation of labor conditions, including the theory and application of the workmen's compensation laws, unemployment insurance and other social security legislation, maximum hours and minimum wage statutes, state industrial safety codes, the Public Contracts Act, Fair Labor Standards Act and related legislation. Labor Relations not a prerequisite. Two hours a week second semester. MR. LIVENGOD

**LEGISLATION.** A general introduction to the field of Public Law, including, among others, the following topics: organization, techniques, procedures, and problems of legislative bodies; formulation of legislative policies; and drafting and interpretation of statutes. Three hours a week first semester. MR. KRAMER

**MUNICIPAL CORPORATIONS.** The nature of municipal corporations; their external constitution; their internal constitution; their powers; their liabilities; remedies for and against municipal corporations. Two hours a week first semester. (Not offered 1951-1952.) MR. McDERMOTT

**PUBLIC REGULATION OF BUSINESS SEMINAR.** Intensive study of the federal antitrust laws and their common-law background, with emphasis on the economic policies involved. Three hours a week second semester. MR. LIVENGOD AND MEMBERS OF THE ECONOMICS DEPARTMENT STAFF

**STATE TAXATION.** Constitutional limitations on the taxing power; jurisdiction to tax; state excise taxes; and the general property tax. Two hours a week first semester. (Not offered 1951-1952.) MR. LOWNDES

**TAX AND ESTATE PLANNING.** See Property Courses, page 30, for description. Two hours a week second semester. MESSRS. BOLICH AND LOWNDES

## *General Courses*

**CONFLICT OF LAWS.** A study of the special problems which arise when the significant facts of a case are connected with more than one jurisdiction. Recognition and effect of foreign judgments; choice of law; federal courts and conflict of laws; the United States Constitution and conflict of laws. Three hours a week first semester. MR. STANSBURY

**FAMILY LAW.** A seminar approach to the cases, statutes, and sociological theories covering the contract to marry, its formation and breach; marriage; annulment; divorce; separation; property rights; and international jurisdiction. Selected materials. Two hours a week first semester. MR. BRADWAY

**SEMINAR IN FAMILY LAW.** A seminar approach to the efforts of the social sciences, including the law, to deal with the intricate and perplexing problems of

the modern family. Readings are assigned in legal and sociological material. Class discussions are based upon some central topic, such as divorce, domestic relations courts, etc. Written reports required in lieu of an examination. Family Law is prerequisite. Two hours a week second semester.

MR. BRADWAY

**JURISPRUDENCE.** Discussion of some of the basic problems of classical and contemporary juristic theory, with applications to cases and statutes. Three hours a week second semester.

MR. KRAMER

**LEGAL HISTORY.** A study of the development of fundamental English and American legal institutions, with emphasis upon historical method and the conditioning factors, social, economic and political. Two hours a week second semester.

MR. BOLICH

**NORTH CAROLINA STATUTES AND DECISIONS.** A study of selected statutes of North Carolina with discussion of their application, and an analysis of the decisions of the Supreme Court of North Carolina construing them. Two hours a week first semester.

MR. BRYSON

**TORTS.** The bases of liability in damages for personal injuries and injuries to property; bases other than fault; negligence; intentional infliction of harm. Procedure in jury trials; proof of negligence; causation and "proximate cause"; defenses; the damages recoverable and equitable relief obtainable. Special rules applicable to occupiers and owners of land, motor vehicle accidents, suppliers of goods and remote contractors. Misrepresentation and fraud; defamation; assault and battery; false imprisonment. Three hours a week throughout the year.

MR. LOWNDES

## *Procedure and Practice Courses*

**CASE STUDIES.** Detailed analysis of an important civil suit, under supervision of a visiting instructor who was counsel therein. The instructor's files and the record and briefs will be studied. Consideration will be given to how the matter first arose and what business or other problems of the client were involved; how counsel first analyzed the matter and how he ascertained relevant facts; how counsel prepared for and conducted the trial and appellate proceedings. One hour a week first semester.

INSTRUCTOR TO BE ANNOUNCED

**CIVIL PROCEDURE I.** A study of modern methods of pleading (including Federal Rules of Civil Procedure) and their relationship to the historical developments insofar as such developments affect or explain present-day rules; also a treatment of real party in interest, joinder of parties, joinder of causes of action, counterclaims, objections to pleadings, amendment to pleadings, and summary disposition of cases. Three hours a week second semester.

MR. MCCLAIN

**CIVIL PROCEDURE II.** A continuation of Civil Procedure I, with special emphasis on trial and appellate practice. Three hours a week second semester.

MR. MAGGS

**EVIDENCE.** Examination of witnesses; admission and exclusion; competency of witnesses; privilege; relevancy; demonstrative evidence; writings; the hearsay rule and exceptions thereto; the burden of producing evidence; presumptions; the burden of persuasion; judicial notice. Four hours a week second semester.

MR. McDERMOTT

**LEGAL AID CLINIC.** During the first semester the objectives of the course are: to give the student experience in actual cases; to develop creative skills, techniques and mental habits; to encourage a sense of responsibility to client, court, profession and community. Students under supervision of staff attorneys and in co-operation with members of the Durham bar, court officials and social and other professional agencies in the community, engage, so far as students may, in the handling of actual cases from the first interview with the client until the final disposition of the problem by litigation or otherwise. Trial briefs are prepared

for lawyers in active practice. In the second semester the students continue their work with actual cases and clients. In addition they are given experience in special exercises such as building legal documents, dealing with members of other professional groups, conciliation proceedings. Appellate briefs are written for lawyers in active practice. Opportunity is afforded for special work in fields of particular interest. Two hours a week throughout the year.

MR. BRADWAY

**LEGAL ETHICS.** A seminar approach to the ethical problems of the lawyer and the profession. Readings are assigned in legal biography, law reform, the history of the profession, legal aid work. Class discussions cover canons of ethics, statutes, cases, and opinions of grievance committees dealing with the daily problems of the practicing lawyer. A written report is required on some phase of the reform of the administration of justice. One hour a week second semester.

MR. BRADWAY

**NORTH CAROLINA PRACTICE.** A study of the steps in an action at law from the issuance of process to the entry of final judgment including service of process; appearance and waiver of process; selecting the jury; various motions made during the trial; submission of case to jury; verdict; judgment; noting and perfecting appeal. Also included are such topics as jurisdiction of various courts in North Carolina; venue; trials without a jury; provisional remedies and special proceedings. Two hours a week second semester.

MR. BRYSON

## *Legal Research and Writing*

**RESEARCH AND WRITING I.** Classroom instruction and individual problems in the use of law books, the preparation of memoranda of law, and moot court briefing and argument. The first year of a two-year program designed to familiarize the student with the materials and methods of legal research and legal writing. One hour a week throughout the year.

MESSRS. STANSBURY, BRYSON, AND BRADWAY,  
AND THE LEGAL AID CLINIC STAFF

**RESEARCH AND WRITING II.** The second year of the two-year program of research and writing. In addition to more advanced work of the kind involved in the first-year program, the student will be assigned one or more problems in research or drafting, and will assist in editing memoranda prepared by first-year students and in judging first-year moot court arguments. Required of all second-year students. One hour a week throughout the year.

MESSRS. STANSBURY, BRYSON, AND BRADWAY,  
AND THE LEGAL AID CLINIC STAFF

Upon recommendation of the Committee on Graduate Study, seminars not listed in the Bulletin may be created or arrangements made for supervision of special research by individual graduate students in any subject.

---

All matters presented in this Bulletin are subject to change as the University or the School of Law may deem expedient.



# Enrollment 1950-1951



## FIRST YEAR

Biloon, Harold Levin (Harvard University), Norwich, Conn.  
Brackney, William Austin (Duke University), Toledo, Ohio.  
Brooks, Val Carlton (Duke University), Wilson, N. C.  
Campbell, Robert Duncan (Duke University), Pelham Manor, N. Y.  
Chadwick, Harry Roberts, Jr. (Duke University), Smyrna, N. C.  
Chambers, Jack Horne (Duke University), Clothier, W. Va.  
Claughton, Edward Napoleon, Jr. (Duke University), Miami, Fla.  
Corley, Donald George (Duke University), Jackson, Mich.  
Cromartie, Martin Luther, Jr. (Duke University), Tarboro, N. C.  
Davis, Gerald E. (Pennsylvania State College), Altoona, Pa.  
Dawson, John Burnette, Jr. (Duke University), Locust Valley, L. I., N. Y.  
Dickens, Wade Hampton, Jr. (Duke University), Scotland Neck, N. C.  
Elf, Robert Duane (University of North Carolina), Jamestown, N. Y.  
Farrow, Thomas Hunter (Virginia Polytechnic Institute), New Market, Va.  
Fletcher, Westwood Hugh, Jr. (Graduate Institute of International Studies, Geneva, Switzerland), Bradenton, Fla.  
Frisch, Robert Myron (Rutgers University), New Brunswick, N. J.  
Galifianakis, Nick (Duke University), Durham, N. C.  
George, Harris James (Duke University), Towson, Md.  
Gwyn, Julius Johnston (Duke University), Reidsville, N. C.  
Hagel, Harry (University of Connecticut), Cromwell, Conn.  
Hubbard, Robert Carl (Duke University), Lancaster, S. C.  
Hudspeth, George Lee (Texas Christian University), Yadkinville, N. C.  
Irwin, William Paul (Duke University), Pittsburgh, Pa.  
Isley, Hugh Galloway, Jr. (Duke University), Raleigh, N. C.  
Kauffman, James Valentine (Franklin & Marshall College), Pittsburgh, Pa.  
Kellam, Floyd Eaton, Jr. (Duke University), Princess Anne, Va.  
Kirby, John Randolph (Presbyterian College), Charlotte, N. C.  
Kistler, David Reeves (Duke University), Creedmoor, N. C.  
McEnteer, Frank Duff (Marietta College), DuBois, Pa.  
May, Cecil Dalton (Duke University), New Bern, N. C.  
Mousmoules, John Andrew (Duke University), Durham, N. C.  
Nunn, Delmas Coleman, Jr. (Duke University), Atlanta, Ga.  
Orzano, Joseph Ernest, Jr. (Duke University), Baldwin, N. Y.  
Pigliowski, Alphonse Aloysius (Duke University), Depew, N. Y.  
Renfrow, Robert Perry (Duke University), High Point, N. C.  
Shaw, John Daniel, Jr. (Duke University), Sistersville, W. Va.  
Shuford, William Albert (Duke University), Thomasville, N. C.  
Siems, Chester Peter, Jr. (Trinity College (Connecticut)), Southampton, N. Y.  
Smith, Calvin Earl (Franklin & Marshall College), Hamburg, Pa.  
Smith, Franklin Calton, Jr. (Duke University), Charlotte, N. C.  
Smith, James Donald (Western Reserve University), Omaha, Neb.  
Smith, Lee Creecy (Duke University), Raleigh, N. C.  
Stipe, Robert Edwin (Duke University), Easton, Pa.  
Sulzer, Mrs. Elizabeth Derr (Duke University), Lancaster, Pa.  
Wagner, William Dean (Colgate University), Trenton, N. J.  
Walker, James Warren (University of Scranton), Susquehanna, Pa.  
Weaver, Lucius Stacy, Jr. (Duke University), Durham, N. C.  
Webster, Richard Carlton (Duke University), Rochester, N. Y.  
Wee, Jason Chito (University of Hawaii), Wahiawa, Hawaii.  
Zimmerman, James Lawrence (Duke University), Durham, N. C.

## SECOND YEAR

Abelson, Robert Carl (Carnegie Institute of Technology), Chattanooga, Tenn.  
Berman, Elliott (Duke University), Houlton, Me.  
Boger, John Ray, Jr. (Duke University), Concord, N. C.  
Brusher, Frederick Londis (University of Alaska), Fairbanks, Alaska.  
Byrd, James Samuel (Duke University), Marion, N. C.  
Carty, James Edward (Washington State College), Ridgefield, Wash.  
Chisholm, Lorenzo Dow (Queens College), Charlotte, N. C.  
Collins, Ira Taylor, Jr. (Duke University), Kingsport, Tenn.  
Comer, Charles Alexander (University of Chattanooga), Chattanooga, Tenn.  
Dudek, Wladyslaw (University of Alabama), Suffield, Conn.  
Dwyer, John Andrew (Presbyterian Junior College), Whiteville, N. C.  
Elkins, Robert Leroy (Marshall College), Logan, W. Va.  
Folger, Fred (Duke University), Mount Airy, N. C.



Ford, Harold Edwin (Duke University), Richmond, Ind.  
 Franks, Bob Allen (University of Pittsburgh), Pittsburgh, Pa.  
 Fuller, Melville Weston, Jr. (Duke University), Durham, N. C.  
 Garber, Mark Edward, Jr. (Duke University), Carlisle, Pa.  
 Gerstein, Joe Willie (Duke University), Covington, Ga.  
 Gillis, Wellington Albert (Northwestern University), Malden, Mass.  
 Gilman, John Bruce, Jr. (Columbia University), White Plains, N. Y.  
 Graves, Ray (Washington State College), Pe Ell, Wash.  
 Hautamaki, Edward William (Duke University), Mass, Mich.  
 Henkel, Lee Hampton, Jr. (Duke University), Charleston, W. Va.  
 Henry, John Frederick (Duke University), Morrisville, N. Y.  
 Hooper, Glenn Lee, Jr. (Duke University), Dunn, N. C.  
 Joseph, Charles Howard (University of Delaware), Georgetown, Del.  
 Levinson, Joe Herman (Duke University), Benson, N. C.  
 Lewis, John R. (University of Washington), Coulee City, Wash.  
 Marlowe, Wallace Ted (Marshall College), Roanoke, Va.  
 Messick, Turner Paul (Elon College), Burlington, N. C.  
 Miller, David Thomas (U. of North Dakota Law School), Tuttle, N. D.  
 Montemuro, Frank John, Jr. (Temple University), Philadelphia, Pa.  
 Moscou, Joseph Jay (Hobart College), New York, N. Y.  
 Myers, Jay Walter (Pennsylvania State College), Berwick, Pa.  
 Novick, Alphonsus Charles (State Teachers College (Pa.)), Frackville, Pa.  
 Oshiro, Robert Chosei (University of Hawaii), Wahiawa, Hawaii.  
 Propst, Clyde Luther, Jr. (Duke University), Concord, N. C.  
 Robinson, Edward Norwood (United States Military Academy), Roseboro, N. C.  
 Rokos, William Jay (Duke University), Manchester, N. H.  
 Scharf, Justin Norbert (American University), Philadelphia, Pa.  
 Scuderi, Peter (Temple University), Philadelphia, Pa.  
 Seay, Thomas Waller, Jr. (Duke University), Spencer, N. C.  
 Smith, Bill Lee (Juniata College), Fayette City, Pa.  
 Smith, Charles Slack (Lafayette College), Easton, Pa.  
 Smith, Herman Amasa (U. of North Carolina Law School), Durham, N. C.  
 Spencer, Joseph Whitney (Ohio State University), Piqua, Ohio.  
 Stott, Grady Bernell (Duke University), Bailey, N. C.  
 Sugarman, Alan Cecil (Duke University), Asbury Park, N. J.  
 Taylor, Robert Charles (Duke University), New Orleans, La.  
 Thompson, James Edward (Duke University), Oak Hill, W. Va.  
 Thompson, Richard Carroll (Lenoir-Rhyne College), Hickory, N. C.  
 Thornhill, Warren Ashby III (Virginia Polytechnic Institute), Beckley, W. Va.  
 Upchurch, Roger Stanley (Duke University), Durham, N. C.  
 Van Anda, Jack Nicholas (Duke University), Durham, N. C.  
 Vann, Arthur (Duke University), Dunn, N. C.  
 Warren, James Gates (Duke University), Washington, D. C.  
 Weldon, Richard Thomas (Elon College), Durham, N. C.  
 Willeford, Brice James, Jr. (Duke University), Kannapolis, N. C.

### THIRD YEAR

Allen, Carnot Richardson, Jr. (Northwestern University), Winnetka, Ill.  
 Anderson, Hugh Roger (U. of Ga. Law School), Hayesville, N. C.  
 Barfield, James Roy (Duke University), Pikeville, N. C.  
 Bebout, Donald Richard (Phoenix Junior College), Washington, Pa.  
 Boddie, Mrs. Grace Collins (State Teachers College (Va.)), Durham, N. C.  
 Booker, James Jackson (Washington Univ. Law School), Timberlake, N. C.  
 Bostwick, John Allen, Jr. (Duke University), Birmingham, Ala.  
 Browning, James Richardson (Duke University), Whiteville, N. C.  
 Caldwell, Robert Tate, Jr. (Harvard University), Ashland, Ky.  
 Chaffin, John Taylor (Duke University), South Mills, N. C.  
 Chappell, Thomas Tye (Duke University), Plainfield, N. J.  
 Claycomb, Charles Percival, Jr. (Western Kentucky State Teachers College), Webster, Ky.  
 Clement, Robert Leiby, Jr. (The Citadel), Charleston, S. C.  
 Dodge, Harold Thaddeus (Champlain College), Londonville, N. Y.  
 Douglas, Richard Sands (Duke University), Westfield, N. J.  
 Dufour, Alfred Edmondston (The Citadel), Durham, N. C.  
 Dufour, Mrs. Milly Smith (Duke University), Durham, N. C.  
 Ely, William Thomas (Murray State Teachers College), Benton, Ky.  
 Engelman, Morton Henry (University of Connecticut), Middlebury, Conn.  
 Everett, Ned Purvis (Davidson College), Robersonville, N. C.  
 Fleming, James Carlton (Duke University), Creedmoor, N. C.  
 Foss, George Bridges, Jr. (Birmingham-Southern College), Birmingham, Ala.  
 Foster, Russell D. (Bethany College), Cardale, Pa.  
 Free, Edgar Dauphin (University of Pennsylvania Law School), Philadelphia, Pa.  
 Glickfield, David (East Tennessee State College), Johnson City, Tenn.  
 Godfrey, George Franklin (Duke University), Jacksonville, Fla.  
 Gore, Jay, Jr. (University of Mississippi), Grenada, Miss.  
 Gregg, James Russell (State College of Washington), Pullman, Wash.  
 Grist, William Taylor (Lenoir-Rhyne College), Charlotte, N. C.  
 Harlem, Arnold (New York University), Brooklyn, N. Y.  
 Harrington, John Allen (Duke University), Merry Oaks, N. C.  
 Hawkins, James Robert (Duke University), Mebane, N. C.

Herrick, John Waters (Stanford Law School), Jamestown, N. Y.  
 Hiaasen, Kermit Odel (Emory University), Fort Lauderdale, Fla.  
 Holmes, James Theodore (William & Mary Law School), Cedar Rapids, Iowa.  
 Hondulas, John Louis (University of Tennessee), Knoxville, Tenn.  
 Howe, Standish Sturtevant (University of Michigan), Port Huron, Mich.  
 Howe, William Bell White (Duke University), Hendersonville, N. C.  
 Jack, Robert George (Ohio State University), Nelsonville, Ohio.  
 Kanehann, William Nicholas, III (Columbia University), Allentown, Pa.  
 Klein, Frederic Milton (Tufts College), New Haven, Conn.  
 Koski, Henry William (Ohio Wesleyan University), Ashtabula, Ohio.  
 Kupp, Elaine Beatrice (Duke University), Depew, N. Y.  
 Larned, George Hambury (Rutgers University), Rutherford, N. J.  
 Loeser, Edward Arthur (Knox College), Galesburg, Ill.  
 McCoy, John Philip (Duke University), Mount Pleasant, Tenn.  
 McKinnon, Arnold Borden (Duke University), Lumberton, N. C.  
 Malloy, Cormac Joseph (Elong College), Philadelphia, Pa.  
 Marsh, John Earl, Jr. (University of Tennessee Law School), Petersburg, Tenn.  
 Martin, George Wilson (Duke University), Mocksville, N. C.  
 Marx, Edward Elias (Franklin & Marshall College), New York, N. Y.  
 Millar, William Imber (Duke University), Waynesville, N. C.  
 Morrow, George Richard (West Virginia Institute of Technology), Forest City, N. C.  
 Morton, Marion Billy (Duke University), Albemarle, N. C.  
 Nazor, Gordon Lang (Duke University), Ashtabula, Ohio.  
 Nichols, Frank David (University of Michigan), Cleveland, Ohio.  
 Olsen, Robert Wayne (University of Michigan), Sioux Falls, S. D.  
 Oppenheim, Alfred Martin (Duke University), Westfield, N. J.  
 Orr, George Eadie (Duke University), Miami, Fla.  
 Page, Robert Lionel (Duke University), Erick, Okla.  
 Pavey, Charles Robert (University of Illinois), Lawrenceville, Ill.  
 Perlis, Marvin Elliott (New York University), Kew Gardens, L. I., N. Y.  
 Perry, James Franklin (Michigan State College), Lansing, Mich.  
 Pierce, John Everett, Jr. (University of Florida), Daytona Beach, Fla.  
 Rabin, David (Duke University), Carrboro, N. C.  
 Rickman, William Millender (Duke University), Asheville, N. C.  
 Rosenberg, Frederick Dietrick (Hamilton College), Binghamton, N. Y.  
 Russell, Howard Mills (University of California at Los Angeles), Wilmington, N. C.  
 Sands, George Lewis (Duke University), Wilmington, Del.  
 Scott, James Allen (Duke University), Concord, N. C.  
 Shell, Vernon Melvin (Furman University), Greenville, S. C.  
 Simmons, Roy Glen (Oberlin College), Manahawkin, N. J.  
 Spence, Charles Wilson (Duke University), Clayton, N. C.  
 Stearns, Donald Masure (Otterbein College), Lima, Ohio.  
 Stevenson, William Hartin, Jr. (Presbyterian College), Sumter, S. C.  
 Styers, Robert Lee (Duke University), Winston-Salem, N. C.  
 Surratt, John Richard (University of North Carolina), Winston-Salem, N. C.  
 Thomaidis, Theodore George (Duke University), Washington, D. C.  
 Thomasson, George Butler (Davidson College), Kings Mountain, N. C.  
 Thomasson, James Toombs, Jr. (West Georgia College), La Grange, Ga.  
 Villanueva, Charles Edward (Duke University), Orange, N. J.  
 Williamson, Edward Lorenza (Wake Forest College), Cerro Gordo, N. C.  
 Wright, James Victor (Duke University), Java, Va.  
 Zwanetz, David (Temple University), Philadelphia, Pa.

## GRADUATE STUDENTS

Chappell, Howard (University of Illinois, U. of Kansas City Law School), Kansas City, Mo.  
 Fisanick, Vasil (St. Francis College, U. of Richmond Law School), Barnesboro, Pa.  
 Foster, Robert Watson (University of South Carolina, U. of South Carolina Law School), Charlotte, N. C.  
 Hardin, Walton (University of Georgia, John B. Stetson Law School), Winston-Salem, N. C.  
 Irwin, John Jackson, Jr. (College of Charleston, U. of South Carolina Law School), Charleston, S. C.  
 Lindsey, Harold Isaac (College of Charleston, U. of South Carolina Law School), Charleston, S. C.  
 Mervine, William David (Williams College, Duke Law School), Phoenixville, Pa.  
 Rice, Oliver Appleton (Presbyterian College, U. of South Carolina Law School), Lancaster, S. C.

## UNCLASSIFIED STUDENTS

Griffin, Charles Franklin (University of North Carolina, Duke Law School), Monroe, N. C.  
 Gwyn, Allen Hatchett, Jr. (Duke University, Duke Law School), Reidsville, N. C.  
 Johnson, George A. H. (Virginia Polytechnic Institute), Elon College, N. C.  
 Mann, Everett J. (University of Rochester, University of Michigan), Durham, N. C.  
 Stout, Mrs. Lina Spence (Meredith College), Durham, N. C.  
 Taylor, Delores (Milwaukee-Downer College), Milwaukee, Wis.









# Duke University School of Law

Publishes

## Law and Contemporary Problems

Each issue of this publication is devoted to a symposium exploring not only the legal but also the economic and other social-science aspects of current problems that cross the lawyer's desk.

Symposiums published or to be published in 1951 include

Commercial Code: Part I

Commercial Code: Part II

War Claims

The Nationalization of British Industries



\$1.25 per issue, postpaid.

\$4.00 per volume of four issues, subscription rate.



## Law and Contemporary Problems

DUKE STATION

DURHAM, N. C.



# BULLETIN OF DUKE UNIVERSITY



## The Divinity School

ANNOUNCEMENTS FOR 1951-1952

VOLUME 23

May, 1951

NUMBER 7-A

# Annual Bulletins

For GENERAL BULLETIN of Duke University, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF UNDERGRADUATE INSTRUCTION, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF THE COLLEGE OF ENGINEERING, apply to *The Secretary*, Duke University, Durham, N. C.

For BULLETIN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES, apply to *The Dean of the Graduate School*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF LAW, apply to *The Dean of the School of Law*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF MEDICINE, apply to *The Dean of the School of Medicine*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF NURSING, apply to *The Dean of the School of Nursing*, Duke University, Durham, N. C.

For BULLETIN OF THE DIVINITY SCHOOL, apply to *The Dean of the Divinity School*, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF FORESTRY, apply to *The Dean of the School of Forestry*, Duke University, Durham, N. C.

For BULLETIN OF THE SUMMER SESSION, apply to *The Director of the Summer Session*, Duke University, Durham, N. C.

Published by Duke University monthly except in July, August, September, and December. Entered as second-class matter March 25, 1929, at the Post Office of Durham, North Carolina, under the Act of August 24, 1912.

BULLETIN  
OF  
DUKE UNIVERSITY



THE DIVINITY SCHOOL

1950-1951  
ANNOUNCEMENTS FOR 1951-1952

DURHAM, NORTH CAROLINA  
1951



# Calendar



## 1951

September 17	Monday, 2:30 P.M.—Orientation program for new students. 4:00 P.M.—First Regular Faculty meeting.
September 18	Tuesday—Registration of entering students.
September 19	Wednesday—Registration of returning students.
September 20	Thursday, 8:30 A.M.—Instruction begins for fall semester.
September 26	Wednesday, 10:30 A.M.—Formal opening exercises.
September 29	Saturday—Last day for changing courses for fall semester.
November 21	Wednesday, 5:00 P.M.—Thanksgiving Recess begins.
November 26	Monday, 2:00 P.M.—Thanksgiving Recess ends.
December 11	Tuesday—Founders Day.
December 20	Thursday, 5:00 P.M.—Christmas Recess begins.

## 1952

January 3	Thursday, 8:30 A.M.—Instruction is resumed.
January 8, 9, and 10	Tuesday, Wednesday, and Thursday—Registration of resident students for second semester.
January 16	Wednesday—Mid-year examinations begin.
January 26	Saturday—Mid-year examinations end.
January 28	Monday—Registration for second semester of students not in residence during first semester.
January 29	Tuesday, 8:30 A.M.—Second semester begins.
February 4	Monday—Last day for changing courses for second semester.
March 21	Friday, 5:00 P.M.—Spring vacation begins.
March 31	Monday, 2:00 P.M.—Instruction is resumed.
April 16	Wednesday, 3:00 P.M.—English Bible examination in Old Testament.
April 24	Thursday, 3:00 P.M.—English Bible examination in New Testament.
May 12-17	Registration for fall semester of students in residence in spring semester.
May 19	Monday—Final examinations begin.
May 29	Thursday—Final examinations end.
May 31	Saturday—Commencement begins.
June 1	Sunday, 11:00 A.M.—Commencement Sermon. 8:00 P.M.—Divinity School Closing Exercises.
June 2	Monday—Commencement Address, Graduating Exercises.

# Officers of Administration



## *General Administration*

ARTHUR HOLLIS EDENS, B.Ph., A.M., M.P.A., Ph.D., LL.D.  
*President of Duke University*

ROBERT LEE FLOWERS, A.M., LL.D.  
*Chancellor of the University*

WILLIAM HANE WANNAMAKER, A.B., A.M., Litt.D.  
*Vice-Chancellor of the University*

PAUL MAGNUS GROSS, B.S., A.M., Ph.D.  
*Vice-President in the Educational Division*

CHARLES EDWARD JORDAN, A.B., LL.D.  
*Vice-President in the Division of Public Relations,  
and Secretary of the University*

HERBERT JAMES HERRING, A.B., A.M., LL.D.  
*Vice-President in the Division of Student Life*

ALFRED SMITH BROWER, A.B.  
*Business Manager and Comptroller*

CHARLES BLACKWELL MARKHAM, A.B., A.M.  
*Treasurer of the University*

## COMMITTEE OF THE BOARD OF TRUSTEES ON THE DIVINITY SCHOOL

W. W. PEELE, T. M. GRANT, H. B. PORTER, N. E. EDGERTON, W. A. STANBURY

## *Educational Administration*

JAMES CANNON, A.B., A.M., Th.B., Th.M., D.D.  
*Dean of the Divinity School*

ELBERT RUSSELL, A.B., A.M., Ph.D., Litt.D.  
*Dean Emeritus of the Divinity School*

HELEN MILDRED KENDALL, A.B.  
*Administrative Assistant and Secretary of the Faculty*

DONN MICHAEL FARRIS, A.B., B.D., M.S.  
*Librarian*

ARLEY JOHN WALTON, A.B., B.S.L., D.D.  
*Director of Field Work*

## *Staff*

VIRGINIA G. LAUGHLIN  
*Secretary to the Dean*

JOYCE G. LOCKHART, A.B.  
*Assistant in the Library*

RUTH C. FAUNCE  
*Secretary to the Recorder*

LOUISE CELLEY  
*Faculty Secretary*

JEAN W. SPICKER  
*Faculty Secretary*

# Faculty



JAMES CANNON, A.B., A.M., Th.B., Th.M., D.D.  
*Dean of the Divinity School and Ivey Professor of the History of  
Religion and Missions*

WALDO BEACH, A.B., B.D., Ph.D.  
*Associate Professor of Christian Ethics*

WILLIAM HUGH BROWNLEE, A.B., Th.B., Th.M., Ph.D.  
*Assistant Professor of Old Testament*

KENNETH WILLIS CLARK, A.B., B.D., Ph.D.  
*Professor of New Testament*

JAMES T. CLELAND, M.A., B.D. (Glasgow), S.T.M., D.D.  
*Professor of Preaching*

ROBERT E. CUSHMAN, A.B., B.D., Ph.D.†  
*Professor of Systematic Theology*

WILLIAM DAVID DAVIES, B.A., B.D., M.A., D.D.  
*Professor of Biblical Theology*

RUSSELL L. DICKS, A.B., B.D., D.D., Litt.D.  
*Associate Professor of Pastoral Care*

FRANKLIN SIMPSON HICKMAN, A.B., A.M., S.T.B., Ph.D., D.D.  
*Professor of Psychology of Religion*

HELEN MILDRED KENDALL, A.B.  
*Administrative Assistant and Secretary of the Faculty*

HIRAM EARL MYERS, A.B., S.T.B., S.T.M., D.D.  
*Professor of Biblical Literature*

JESSE MARVIN ORMOND, A.B., B.D., D.D.  
*Professor Emeritus of Practical Theology*

RAY C. PETRY, A.B., A.M., Ph.D., LL.D.  
*Professor of Church History*

GILBERT THEODORE ROWE, A.B., S.T.D., D.D., Litt.D.  
*Professor Emeritus of Christian Doctrine*

JOHN JESSE RUDIN, II, A.B., B.D., M.A., Ph.D.  
*Assistant Professor of Speech*

THOMAS ANTON SCHAFER, A.B., B.D., Ph.D.  
*Assistant Professor of Historical Theology*

HILRIE SHELTON SMITH, A.B., Ph.D., D.D., Litt.D.  
*Professor of American Religious Thought*

HERSEY EVERETT SPENCE, A.B., A.M., B.D., D.D., Litt.D.  
*Professor of Religious Education*

WILLIAM FRANKLIN STINESPRING, B.A., M.A., Ph.D.  
*Professor of Old Testament*

ARLEY JOHN WALTON, A.B., B.S.L., D.D.  
*Associate Professor of Practical Theology and Director of Field Work*

JAMES FOSTER BARNES, A.B., A.M.  
*Lecturer on Church Music*

† On sabbatical leave, fall semester, 1951-52.

# General Information



## HISTORICAL STATEMENT

THE Indenture of Trust signed on December 11, 1924, by Mr. James B. Duke, which established Duke University, mentioned first among its objects the training of ministers of the Gospel. The Divinity School was, accordingly, the first of the graduate professional schools to be organized. Its work began with the year 1926-27, the formal opening exercises being held on November 9, 1926.

The Reverend Doctor Edmund Davison Soper was the first dean of the Divinity School. He was succeeded in 1928 by the Reverend Doctor Elbert Russell, and the latter in turn in 1941 by the Reverend Doctor Paul Neff Garber. In 1944, Dean Garber was elected to the episcopacy of the Methodist Church, and Doctor Harvie Branscomb assumed the duties of the dean's office. In 1946, Dean Branscomb became Chancellor of Vanderbilt University, and in 1947 the Reverend Doctor Paul E. Root was elected dean but died before he could assume the office. The Reverend Doctor Harold A. Bosley became dean in 1947 and resigned in 1950 to become the pastor of the First Methodist Church, Evanston, Ill. The Reverend Doctor James Cannon was appointed Dean of the Divinity School March 1, 1951.

## THE PURPOSE OF THE DIVINITY SCHOOL

The primary purpose of the Divinity School is to provide training for individuals planning to enter the Christian ministry. This includes not only prospective ministers in local churches, but also those preparing themselves to be missionaries at home and abroad, directors of religious education, teachers of religion, chaplains, and social workers. Vital to all of these forms of service is a full understanding of the beginnings, content, and history of the Christian faith and its special pertinence for the spiritual needs of the modern world. Studies of a broad and thorough character directed toward such an understanding constitute the center of the curriculum of the Divinity School and are regarded as the basic training for all prospective Christian workers. Specific training in the skills required of local ministers and of leaders in the work of religious education are also provided. As funds become available for the purpose and as needs appear, additional training in specialized skills and areas of knowledge will be added to the curriculum.

Though bound by ties of history and obligations to the Methodist

Church, the Divinity School is ecumenical in its interests and outlook. Its faculty is limited to no one denomination, but draws upon the resources of them all. Students of the several denominations are admitted on the same basis. The Divinity School conceives its task to be one of broad service to the Church of Christ in all of its forms.

### THE RELATION OF THE DIVINITY SCHOOL TO DUKE UNIVERSITY

The Divinity School is an integral unit of the University and shares fully in its activities, privileges and responsibilities. The Sunday services in the University Chapel give the Divinity School students an opportunity to hear each year a number of leading preachers of the country. The University Libraries make easily accessible a rich collection of approximately a million volumes. Selected courses in the Graduate School of Arts and Sciences and in the professional schools are open to Divinity School students without payment of additional fees. The general cultural and recreational resources of the University are available to them on the same basis as other students.

### LIBRARY RESOURCES

The Divinity School has its own library containing over fifty thousand volumes. It is rich in complete files of the more important religious journals and periodicals, in source materials, particularly for the study of American church history, missions and the history of religion, and in facsimiles of the more important manuscripts of the New Testament. Among the most treasured possessions of the Library are fifteen Greek manuscripts of the eleventh to seventeenth centuries. Eleven are Greek New Testament, of which one is a magnificent manuscript of the thirteenth or fourteenth century, containing the entire text of the New Testament; four are liturgical manuscripts containing material valuable for studies in the New Testament and church history.

The combined libraries of the University contain over a million volumes. The General Library of the University is connected by a corridor with the Divinity School Building. It contains seven hundred thousand volumes and receives the current issues of several thousand periodicals. The General Library contains also a catalogue of the library of the University of North Carolina located at Chapel Hill, twelve miles away, and a system of exchange operates between the two libraries so that books may be secured from that library also within a few hours.

The Henry Harrison Jordan Loan Library was endowed in 1947 by the children of the late Reverend Henry Harrison Jordan for the purpose of providing ministers in the field with the best of current religious literature. This collection was an outgrowth of the Duke Divinity School Loan Library established in 1944.



## RELIGIOUS AND SOCIAL LIFE

One of the most important aspects of a program of training for religious service is the development of a warm and discriminating spiritual experience. The center of the corporate life of the Divinity School is its own place of worship, York Chapel. Regular chapel services are held at which all students are expected to be present. Services are led by members of the faculty, by visiting ministers, and by members of the student body. Ordination and other special services are held upon occasion. On each Sunday morning services are held in the University Chapel.

The student body of the Divinity School is united by a strong sense of fellowship and common interest. Student committees organize and supervise social projects and missions of preaching, jail visitation, and related enterprises. Opportunities for occasional preaching are always available.

## PUBLIC LECTURES

The Divinity School presents several public lectures annually. The lectures for 1950-51 were: Professor Roger Hazelton, Abbot Professor of Christian Theology in Andover-Newton Theological Seminary, "Theology and Liturgy"; Dr. Emile Cailliet who holds the Stuart Chair of Christian Philosophy at Princeton Theological Seminary, "The Pascalian Answer to Our Problems"; Harrison S. Elliott, General Secretary, The Religious Education Association of the United States and Canada, "Current Issues in Religious Education"; and Dr. Ralph A. Felton, of Drew Theological Seminary, "The Rural Church in a Changing Society." Other visiting speakers were the Reverend Garland Hendricks, Bishop Charles Brashares, Dr. E. McNeil Poteat, Dr. Eugene Conover and Mr. John Scotford. Speakers at the annual Missionary Emphasis Week were Dr. Eugene Smith, Dr. Karl Quimby, Dr. J. A. Engle, Dr. M. O. Williams, and the Reverend Archer R. Turner, all of the Methodist Board of Missions.

## THE DIVINITY SCHOOL LIBRARY LECTURES

In 1948 the Duke Divinity School Library Lectures were established by the Reverend George Brinkmann Ehlhardt for the purpose of bringing to the campus a succession of the greatest religious leaders of the day. In 1950 this lecture was given by the Reverend Doctor John Cecil Trever, Director of the Department of the English Bible, The International Council on Religious Education. The lecture, entitled "From Ancient Scroll to Modern Bible," was given in conjunction with the exhibition of three ancient Hebrew scrolls lent by His Eminence, Mar Athanasius Yeshue Samuel, Metropolitan and Archbishop of Jerusalem and Trans-Jordan.

The lecturer for 1951 was Bishop Paul Neff Garber, presiding

Bishop of the Geneva Area of the Methodist Church who spoke on the subject, "Religion in Europe As I Have Seen It."

### THE CHRISTIAN CONVOCATION

The Christian Convocation of 1951 was held on the Duke campus from June 5-8. The Convocation, under the joint sponsorship of the Duke Divinity School, The North Carolina Pastors' School, The North Carolina Rural Church Institute, and The Board of Ministerial Training of the Methodist Church, brought to the campus an outstanding group of religious leaders as lecturers and teachers.

### ENDOWED SCHOLARSHIP FUNDS

Certain special scholarship funds have been established, the income of which is available for students wishing to secure training in preparation for the Christian ministry.

These scholarships are all awarded on the basis of service performed in a local church, thus providing for the student experience as well as financial aid.

#### N. EDWARD EDGERTON FUND

In 1939 Mr. N. Edward Edgerton of Raleigh, North Carolina, an alumnus of Duke University of the Class of 1921, a member of the Board of Trustees of the University and a member of the Committee on the Divinity School, established the N. Edward Edgerton Fund. The award is limited to students who are candidates for the B.D. degree.

#### P. HUBER HANES SCHOLARSHIP

Mr. P. Huber Hanes of Winston-Salem, North Carolina, an alumnus of Duke University of the Class of 1900 and a member of the Board of Trustees, has established an annual scholarship yielding the sum of \$400.00.

#### ELBERT RUSSELL SCHOLARSHIP

In 1942 the Alumni Association of the Divinity School established a scholarship fund in honor of Elbert Russell, Dean Emeritus of the Divinity School and for a number of years Professor of Biblical Theology.

#### W. R. ODELL SCHOLARSHIP

In 1946 the Forest Hills Methodist Church, Concord, North Carolina, established a scholarship fund in memory of W. R. Odell, for many years a member of the Board of Trustees of the University.

#### HERSEY E. SPENCE SCHOLARSHIP

In 1948 the Steele Street Methodist Church of Sanford, North Carolina, established a scholarship fund in honor of Professor Hersey E. Spence, a former pastor of the congregation.

## JESSE M. ORMOND SCHOLARSHIP FUND

In 1949 the North Carolina Conference established a scholarship fund in honor of Professor Jesse M. Ormond, who for many years was Director of Field Work in the Duke Divinity School and Professor of Practical Theology.

## DUKE ENDOWMENT GRANTS-IN-AID

The Duke Endowment provides aid to North Carolina rural Methodist churches for operation and maintenance. There are available from this source grants-in-aid to provide additional pastoral service. At the present rate of income approximately sixty students can be employed as assistant pastors in this service during the summer. Terms of these grants are given on page 13 of this catalogue.

## ANNUAL SCHOLARSHIPS

In addition to the endowed scholarships and funds provided by the Duke Endowment, the Divinity School receives annual scholarship funds from the following churches and individuals: The Edenton Street Methodist Church, Raleigh, N. C.; Myers Park Methodist Church, Charlotte, N. C.; The North Charleston, S. C., Methodist Church; the Dilworth Methodist Church, Charlotte, N. C.; Buford Street Methodist Church, Gaffney, S. C.; the South Carolina Conference of the Methodist Church; the First Methodist Church and the Johnson City District of Johnson City, Tenn.

These scholarships are awarded on the same basis as the endowed scholarships.

## THE METHODIST COLLEGE ADVANCE

The Divinity School was a participant in the North Carolina Methodist College Advance with askings of \$200,000.00 for scholarship aid and extension of the School's service to ministers. Many local churches and individuals have shared in the raising of this significant sum. Specific contributions are the Henry Harrison Jordan Loan Library and the James A. Gray Fund.

## THE JAMES A. GRAY FUND

In 1947 Mr. James A. Gray of Winston-Salem, North Carolina, presented the fund which bears his name to the Divinity School for use in expanding and maintaining its educational services in behalf of North Carolina churches and pastors. From this fund three scholarships are awarded, two in city church work, and one in rural church work. The Divinity School Seminars and a number of scholarships in the School for Accepted Supply Pastors are also supported by income from this gift. In 1950 the James A. Gray Lectures were established and the first series was given by Dr. Ralph W. Sockman, pastor of

Christ Church (Methodist) of New York, during The Christian Convocation. The second series of these lectures was given at the 1951 Convocation by Dr. Paul E. Scherer of Union Theological Seminary, New York.

### COURSES OF STUDY OFFERED BY THE DIVINITY SCHOOL

The Divinity School offers at present two courses of study. The basic course is that which leads to the degree of Bachelor of Divinity. This is a three-year course and is recommended to all those preparing themselves for the work of the regular pastoral ministry. Students who hold pastoral charges, or other remunerative work requiring any substantial time apart from their studies, may carry only reduced schedules of work and in most cases, unless work is taken in the Duke University Summer Session, will spend four years in completion of the requirements for the B.D. degree.

Beginning with the year 1944-45 the Divinity School offered also a course of study leading to the degree of Master of Religious Education. This course is designed for individuals who wish to become directors or to take other specialized positions in the work of religious education. The course does not provide a general preparation for the work of the regular ministry and cannot serve as a substitute for it. No exchange of credits between the two courses is permitted, nor can departmental courses taken be credited toward more than one degree. Only a limited number of candidates for the Master of Religious Education degree will be accepted annually.

The requirements for each of these degrees are stated on pages 17 through 25 in this catalogue.

### COURSES OF STUDY IN RELIGION OFFERED BY THE GRADUATE SCHOOL OF ARTS AND SCIENCES

Students who desire to pursue work in religion beyond that for the Bachelor of Divinity degree should register in the Graduate School of Arts and Sciences, through which the degrees of Master of Arts and Doctor of Philosophy may be obtained. This advanced work is administered through the Department of Religion of the Graduate School and is available to qualified persons of all denominations on an equal basis. Study and research may be pursued in three fields: (1) Biblical Studies; (2) Studies in Church History; and (3) Studies in Christian Thought. A list of courses approved by the Graduate Council for work in these fields, together with general requirements for admission to the Graduate School, may be found in the *Bulletin of the Graduate School*. This Bulletin is available on application to Dean Paul Gross, the Graduate School of Arts and Sciences, Duke University.

A limited number of University Scholarships and Fellowships, among which are three Gurney Harriss Kearns Fellowships of \$1,000



each, may be obtained by exceptionally qualified students. Applications for these must be submitted to Dean Gross on University form blanks not later than March 15 of each year.

Inquiries concerning specific requirements of the Department of Religion in the Graduate School should be addressed to Professor H. Shelton Smith, Director of Graduate Studies in Religion.

#### FACILITIES FOR ADVANCED STUDY IN THE AMERICAN SCHOOLS OF ORIENTAL RESEARCH

The Divinity School of Duke University is one of the supporting members of the American Schools of Oriental Research. Accordingly, students in the Divinity School have the privilege of attending the American School in Jerusalem or the one in Bagdad without charge for tuition. They may also compete for the financial aids which are offered annually by the Schools. These consist of four fellowships, the stipends depending upon available funds.

#### DIVINITY SCHOOL SEMINARS

The Divinity School, under provision of the James A. Gray fund, conducts each year two extension seminars providing two-day study courses for ministers. In 1950-51 these seminars were conducted at Myers Park Methodist Church, Charlotte, N. C., and the First Methodist Church, Wilson, N. C. Lecturers were Bishop Fred P. Corson, Dr. W. D. Davies, and Dr. Kenneth W. Clark.

#### FRANK S. HICKMAN PREACHING PRIZE

The Frank S. Hickman prize in preaching, amounting to \$50.00 in cash for the best sermon preached in an annual contest, was established in 1950.

#### SCHOOL FOR ACCEPTED SUPPLY PASTORS

In cooperation with the Board of Ministerial Training and the Southeastern Jurisdictional Conference of the Methodist Church, the Divinity School conducts a School for Accepted Supply Pastors of the Methodist Church. The School for 1951 is scheduled for July 3-19.



# Cost, Residential Arrangement, and Student Aid



## FEES AND COSTS

THE University tuition charge is \$175 per semester. Scholarships covering this amount are granted to all Divinity School students. Other charges are as follows:

### *Fees per semester:*

General Fee .....	\$ 50.00
Approximate cost of meals per semester .....	175.00
Room per semester (double room) .....	62.50
Total per semester .....	<hr/> \$287.50

The "General Fee" is in lieu of all special charges, and includes the following Fees: Matriculation, Medical, Library, Damage, Commencement and Diploma. Students may secure admission to all athletic contests held on the University grounds by payment of the Athletic Fee of \$5.00 per semester, plus any Federal taxes that may be imposed.

Due to rising costs, a readjustment in charges, including room rents, is being considered. In the event of an adjustment, applicants will be notified.

## LATE REGISTRATION

Students matriculating in either semester at a date later than that prescribed in the catalogue shall pay to the Treasurer of the University a penalty of \$5.00.

## DINING HALL

The dining halls in the University Union have accommodations for all resident Divinity School students. Food service is cafeteria style. The cost of meals approximates \$1.50 to \$2.00 per day depending upon the need and taste of the individual. The dining facilities on the West Campus include three cafeterias with multiple choice menus and, in addition, the Oak Room where full meals and *a la carte* items are served.

## LIVING QUARTERS

Divinity School students are housed in the University dormitories along with other graduate and professional students. Application for room assignments should be addressed to the Housing Bureau, Duke Station, Durham, N. C. The cost of a single room is \$87.50 per

semester, or a double room \$62.50 per student per semester. A reservation fee of \$25 is required at the time a room is assigned. This reservation fee is deducted from the room charges at the time of registration. Students are urged to apply for rooms as early as possible. Under present circumstances delays in application are likely to result in failure to secure accommodations. Students occupying rooms in the dormitories who wish to retain their rooms for a following year must notify the Office of the Director in the Business Division by May 15.

All rooms in the dormitories are provided with heat, water, electric lights, and essential furniture. Each student furnishes his own blankets, sheets (mattresses 39" x 74"), pillows and pillow slips, towels, rugs and curtains.

The University has no apartments for married students. Students desiring such quarters should plan to arrive in Durham as early as possible before the opening of the fall semester in order to make their living arrangements. While the Divinity School Office will assist wherever it can in these matters, it cannot assume responsibility for making such arrangements.

### STUDENT AID

Duke University remits its regular tuition charges to all students enrolled in the Divinity School. In recognition of this, students are expected to render occasional services such as teaching of church school classes and responding to calls for particular services. Financial aid, over and above this, is available only in the form of grants-in-aid and work scholarships. These funds come from the sources described on pages 8-9 of this catalogue. Those appointed to such work agree to give ten weeks' service during the summer months to a church to which they are assigned. In return they receive their board and room for the period of their summer service and amounts varying up to \$600. By special arrangement a student may be assigned to a church for five weeks' work with one-half the stated remuneration. This plan provides an opportunity for earning a large part of the year's expenses, while at the same time assuring the student valuable experience in religious leadership.

In most cases students will be expected to be able to finance themselves for the first semester of work in the Divinity School; those who show that they can carry their school work satisfactorily are then eligible for various forms of financial assistance.

Students who must have additional income over and above their summer's earnings may secure part-time employment during the academic year. They are strongly urged, however, to make their arrangements so that they will not have duties which will prevent their tak-

ing the fullest advantage of the educational and cultural opportunities of the Divinity School.

### FIELD WORK SUPERVISION

The Department of Field Work is maintained to help students receiving financial aid to secure work opportunities where they may render service for such aid. Their work will be supervised so that their experiences may be part of their ministerial training. Students are also helped to secure work opportunities for the experience to be gained. All students working under the department have their board, room, laundry, and travel expenses provided by the charge served. Certain courses are required of all students engaged in field work and are designed to prepare students for the work in which they engage. All students assigned to field work must maintain satisfactory grades and attitudes.

### LOAN FUNDS

Divinity School students who have satisfactorily completed one semester's work are eligible to apply for loans from the University Loan Funds. Such applications should be filed on the approved forms in the Office of the Secretary of Duke University within the first week of each semester.

### STUDENT GOVERNMENT ASSOCIATION

Each student of the Divinity School upon enrollment becomes a member of the Student Government Association. Four officers are elected by the student body annually in April to serve for the following year. These officers, the President, Vice-President, Secretary, and Treasurer, along with the Dean of the Divinity School, serve as the Executive Committee, and the committee chairmen constitute the Student Council which meets in monthly session to review and coordinate the programs of the several committees. It is desired that all students contribute to the corporate life of the School through active participation in the work of the committees. The Association operates on the basis of a unified budget, each student contributing to its support dues in the amount of \$3.00 per semester.

### *Requirements for Admission*

The Divinity School is a fully accredited member of the American Association of Theological Schools, and is one of the ten accredited seminaries of the Methodist Church. Candidates for admission must hold the degree of A.B., based upon four years of work beyond secondary education, in a college which is approved by one of the regional accrediting bodies, or the equivalent of such a degree, and their college records must be such as to indicate their ability to carry on

graduate professional studies. They will be admitted without examination on presentation of an official transcript of college and other academic credits which they may have secured. The application of students from foreign countries will be considered, each on its own merits, the general principle being that a training equivalent to that of a baccalaureate degree from an accredited American college must have been secured. Women will be admitted on the same basis as men. The Divinity School accepts students who desire to transfer from other accredited theological schools on the basis of transcripts of their work and honorable dismissal. However, all transfer students will be expected to meet the full requirements of the Divinity School and should recognize the fact that there may be loss of time in conforming to these requirements. Credits will be formally accepted only after the student has spent one semester in the Duke Divinity School. In addition to an adequate academic preparation, applicants must satisfy the Faculty as to their Christian character and purpose. A formal application blank may be secured from the office of the Divinity School. This must be filled out and returned by all candidates for admission. Application for admission should be made as soon as possible after the beginning of the applicant's last semester of college work. Applications received after April 1 cannot be assured of admission or financial aid for the ensuing academic year.

The number of applications for admission to the School is considerably larger than the number of vacancies. In view of this fact, applicants are required on notification of admission to signify their acceptance within two weeks, and to pay an admission fee of \$15.00. This fee is applied to the regular first-term bill if the student matriculates; if he fails to do so, the fee is forfeited. In cases of applicants to whom pre-enrollment is granted for as long as a year prior to the date of entrance, this fee must be paid not later than six months prior to the date of matriculation.

### ADMISSION ON PROBATION

1. Applicants for admission who are graduates of non-accredited colleges will be considered on their merits, but only those who give evidence of special promise will be admitted. Specifically, such applicants must show that they have attained a superior average (approximately "B") for a four-year college course.

Admission of such persons will, in every case, be *on probation*.

2. Applicants for admission who are graduates of accredited colleges but whose college records do not fully meet Divinity School standards may be admitted *on probation* if their recommendations justify consideration.



Probation means:

a. Students who, during the first year of Divinity School work (thirty semester hours), maintain a consistently low average, including one or more failures, will be required to withdraw from the school.

b. In the case of a student admitted on probation, no credit will be granted toward either the B.D. or the M.R.E. degree for any course in which, during the first year's work (thirty semester hours), a grade of less than "C" (see catalogue section on "grading system") is recorded, unless the student's entire average in the semester during which a "D" grade is received is "C" or better.

c. When the student has been admitted on probation, and is subsequently found to be deficient in the essential requisites of any given area of the "Pre-Seminary Curriculum" (see next section of catalogue), the Divinity School Faculty reserves the right to direct that the student make up such deficiencies by additional courses of study taken in other schools of Duke University in order to qualify for either the B.D. or M.R.E. degree, but without credit for such courses toward those degrees.

### PRE-SEMINARY CURRICULUM

The Divinity School, in substantial agreement with the standards of the American Association of Theological Schools, recommends that prospective candidates for admission keep in mind the desirability of including the following in their undergraduate curriculum:

It is suggested that a student should acquire a total of 90 semester hours or complete approximately three-fourths of his college work in the areas listed below. No work done towards a first college degree may be used towards a Divinity School degree.

<i>Basal Fields</i>	<i>Semester</i>	<i>Sem. Hours</i>
English	6	12-16
Literature, Composition and Speech		
Philosophy	3	6-12
At least two of the following:		
Introduction to philosophy, history of philosophy, ethics, logic		
Bible or Religion	2	4-6
History	3	6-12
Psychology	1	2-3
A foreign language	4	12-16
Greek and Hebrew are especially recommended.		
Natural sciences	2	4-6
Physical or biological		
Social sciences	2	4-6

At least two of the following:

Economics, sociology, government or political science, social psychology, education.



Concentration of work, or "majoring," is a common practice in colleges. For such concentration or major, a constructive sequence based upon any one, two, or three of the above fields of study would lead up naturally to a theological course.

Of the various possible areas of concentration, where areas of concentration are required, a major in English, philosophy, or history is regarded to be the most desirable.

### *Requirements for the Degree of Bachelor of Divinity*

During the academic year 1948-49, the curriculum of the Divinity School was extensively revised. By action of the Faculty, all students admitted to the Divinity School as of September 1, 1949, or later, will conform to the requirements for the B.D. degree as printed in this issue of the catalogue. A special committee, consisting of the Dean, the Recorder and Professor Petry, will adjust the curriculum to the rights and needs of all other students.

The plan for the first two years of the revised curriculum went into effect as of September, 1949. The Vocational Groups and the Senior Seminars called for in the work of the third year were put into effect for the year 1950-51.

The requirements for the degree of Bachelor of Divinity are the following:

Completion of ninety semester hours of course work, including the required courses of the core curriculum, listed on page 20.

The selection, not later than the end of the middle year, of one of the Vocational Groups, and completion of the special requirements of the Group chosen, including satisfactory completion of the work of one Senior Seminar.

Demonstration of a detailed knowledge of the contents of the narrative portions of the English Bible. Examinations for this purpose in Old and New Testament are given each spring. (See Calendar for exact dates.)

Students who show deficiencies in English will be required to take special training in addition to meeting the other requirements for the degree. A degree may be withheld on the grounds of English deficiency only.

The course leading to the degree of Bachelor of Divinity is planned to cover three years of normal academic work. In no case will this degree be conferred on a student until he has spent at least two semesters in residence in the Divinity School. This is defined as the completion of thirty semester hours of work, not more than six hours of which may be taken in the Duke University Summer Session.

By special permission a student who has begun his work in Duke Divinity School as a candidate for the B.D. degree may be given credit for not more than 30 semester hours of work taken in another seminary on the approved list of the American Association of Theological Schools. Except in unusual cases, request for such credits must be approved prior to the beginning of work at the other institution. In every such case, however, the final 15 hours of class credit presented for graduation must be done at Duke and must include satisfactory completion of one of the Senior Seminars. No such student will be relieved of any of the requirements for graduation specified in the catalogue of the Duke Divinity School.

Unless all the work offered for the B.D. degree is completed within a period of nine years from the date of beginning, the student will be required to make formal application for re-admission and re-evaluation of his credits in the light of the then-existing curriculum of the Divinity School. Except in unusual cases, work of a fragmentary character taken over a long period of years, or work taken many years before a student is admitted to the Duke Divinity School, will not be accepted for credit toward the B.D. degree.

# Distribution of Courses by Years

## FIRST (JUNIOR) YEAR

<i>First Semester</i>	<i>Semester Hours</i>	<i>Second Semester</i>	<i>Semester Hours</i>
11. Introduction to the Old Testament	4	18. Early Christian Life and Literature	4
13. History of Pre-Reformation Church	4	20. Introduction to Christian Theology	4
15. Living Religions	3	22. Psychology of Religion	3
17. Effective Speaking	2	English Bible Examination	0
*Free Elective	2 or 3	*Free Elective	2 to 4
		Field Work Seminar (For those doing field work)	1
	15 or 16†		14 to 16†

## SECOND (MIDDLE) YEAR

<i>First Semester</i>	<i>Semester Hours</i>	<i>Second Semester</i>	<i>Semester Hours</i>
23. Practical Theology (2)	4	24. Missions (2)	4
25. Religious Education (2)	3	26. Pastoral Care (2)	3
27. Christian Ethics	2	28. Movements in American Religious Thought	3
21. Introduction to the History of Christian Doctrine	2	14. Reformation and Post-Reformation Church History	2
19. Introduction to New Testament Theology	2	12. Psalms, Wisdom Literature, etc.	2
29. Sermon Construction—Theory	2	30. Sermon Construction—Practice	2
*Free Elective	2 or 3	*Free Elective	2 or 3
	15 or 16†		15 or 16†

\* Language counts as free elective.

† A student who secures credit for 15 s.h. each semester will be in line for graduation at the end of three academic years.

*Schedule of the Core Curriculum*

## FIRST YEAR—FIRST SEMESTER

<i>Hour</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
8:30						
9:30		C. H. 13	C. H. 13	C. H. 13	C. H. 13	
10:30		Chapel	Chapel	Chapel	Chapel	
11:00		H. R. 15	Assembly	H. R. 15	H. R. 15	
12:00		O. T. 11	O. T. 11	O. T. 11	O. T. 11	
2:00		Speech 17†		Speech 17†		
Not over three additional hours may be scheduled.						

## FIRST YEAR—SECOND SEMESTER

<i>Hour</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
8:30						
9:30		Theol. 20	Theol. 20	Theol. 20	Theol. 20	
10:30		Chapel	Chapel	Chapel	Chapel	
11:00		Psy. Rel. 22	Assembly	Psy. Rel. 22	Psy. Rel. 22	
12:00		N. T. 18	N. T. 18	N. T. 18	N. T. 18	
2:00		*Pract. Theol. 144	*Pract. Theol. 142			
Not over three additional hours may be scheduled.						

\* Students doing any kind of field work will choose one of these seminars.

† Additional sections of Speech are available.

## SECOND YEAR—FIRST SEMESTER

<i>Hour</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
8:30						
9:30		R. E. 25	P. T. 23	R. E. 25	P. T. 23	
10:30		Chapel	Chapel	Chapel	Chapel	
11:00		Ch. Eth. 27	Assembly	Ch. Eth. 27	Ch. Eth. 27	
12:00		N. T. 19	Theol. 21	N. T. 19	Theol. 21	
2:00		Preaching 29		Preaching 29		
		Not over three additional hours may be scheduled.				

## SECOND YEAR—SECOND SEMESTER

[illegible]



## THIRD (SENIOR) YEAR

VOCATIONAL GROUPS. (One of these to be chosen by every B.D. candidate not later than the end of the Middle Year. Core curriculum courses do not count for elective credit.)

## I. THE PREACHING MINISTRY AND PASTORAL SERVICE

In the third year, students electing Vocational Group I must take one course from each of the following fields, except in the case of those students who have previously elected these courses during the first two years:

Religious Education	Speech (for those found deficient in
Practical Theology	first course)
Pastoral Care	Philosophy of Religion

The student will also elect one Senior Seminar; he may not take more than one without special permission of the Dean. The seminar will carry credit of two semester hours. Free electives in sufficient amount to complete 90 hours for graduation will be taken.

## II. APPLIED CHRISTIANITY

A. Religious Education. In the third year, students electing Vocational Group II must take the following courses, except in the case of those students who have previously elected these courses during the first two years:

Religious Education and Practical Theology (3 courses distributed between the two departments)  
Psychology of Religion (1 course)

The student will also elect one Senior Seminar; he may not take more than one without special permission of the Dean. The seminar will carry credit of two semester hours. Free electives in sufficient amount to complete 90 hours for graduation will be taken.

(Students planning to teach the Bible in public schools should elect some work in Bible.)

B. Missions.

C. Chaplaincy: Hospital or General.

D. Campus Religious Directors.

(These to be developed.)

## III. TEACHING AND RESEARCH IN RELIGION

In the third year, those choosing Vocational Group III must take one course from each of six drawn from the following eight fields:

American Religious Thought	History of Religion
Bible (may be language)	Psychology of Religion
Christian Ethics	Religious Education
Church History	Theology

The student will also elect one Senior Seminar; he may not take more than one without special permission of the Dean. The seminar will carry credit of two semester hours. Free electives in sufficient amount to complete 90 hours for graduation will be taken.

## ADMINISTERING THE CURRICULUM

For the administration of the curriculum the following regulations have been adopted:

Full-time students will take the core required courses as specified for the respective semesters, being limited to the amount of free elective work indicated in each term. The only exceptions are as specified in the provision for languages.

Since the four-day-a-week schedule of required courses and the free week-ends have been planned with special reference to the needs of students holding pastoral charges, such students are permitted, but not required, to carry the total of hours of the core requirements for the first four semesters, but free electives may not be taken until all the core requirements have been fulfilled. The amount of work allowed in the last two semesters will be governed by the same principle. Such students may not carry more than the core curriculum or its equivalent without special permission of the Dean. A student who does not do creditable work will be required to reduce his schedule.

The status of "special student" may not be granted simply to permit avoidance of the schedule of core required courses. Every request for this classification will be carefully investigated and approval voted in each case by the curriculum committee in the cases of students already admitted to the Divinity School, and by the admissions committee in the case of applicants for admission as "special students."

Students working under the Duke Endowment, and others holding charges, are required to take one of the Field Work seminars. This work will be taken in the second semester of the first year. Unless taken at that spot, such seminars will be charged against the "free elective" allowance of later terms.

For a student taking both Greek and Hebrew, the Greek may be continued in the second year by postponing one or both of the 2-hour core courses in Old and New Testament. In such cases, the Hebrew will be the free elective in that year.

A part-time student who desires to begin the study of Greek in the first year may postpone the core required course in Old or New Testament.

Suitable entry will be made on the permanent record of any student who is granted permission to deviate from the core requirements in the matter of language.

It is the responsibility of each student to see that he meets all requirements for graduation, and to take his courses in proper sequence. He is also responsible for seeing that any special permission granted him to deviate from the normal program is properly recorded in his personal file. Members of the Faculty have no authority to grant deviations unless these are stated in a letter from the instructor in question to the Dean; these to be added to the student's permanent record.

### GRADING SYSTEM

The grading system of the Divinity School employs the letters A, B, C, D, and F, which have been defined as follows: A = Excellent; B = Good; C = Acceptable; D = Poor, and F = Failure. No per-

centage equivalents are stated. A student is expected to maintain an average of C.

The Faculty has voted that in the average course of considerable size, especially core curriculum courses, the total of A and B grades should not run above 33⅓%. In all courses where the instructor considers attendance a necessary part of the work of the course, a student may not receive a grade of over C if his absences total 12% of the regular class periods, and if the absences total 24% of the class periods he may not receive credit for the course.

Grades of Incomplete received at the end of the fall semester must be removed by the completion of the work of the course not later than March 15. Grades of Incomplete received at the end of the spring semester must be removed by October 1. If the work of the course is not completed by these dates, the grade shall be recorded as "F."

No student shall be permitted to drop a course after the expiration of one-third the period of instruction of the course without incurring failure except for causes adjudged by the Dean to be beyond the student's control.

### *Requirements for the Degree of Master of Religious Education*

(Requirements for this degree are being revised. Beginning in September, 1952, sixty semester hours will be required. From one-fourth to one-third of this will be given to practice training. In view of these contemplated changes no applicants will be admitted who cannot show that they can complete all present requirements by September 1, 1952.)

The course of study leading to this degree is designed to provide training primarily for individuals desiring to become educational assistants in churches or to engage in other forms of Christian education.

Candidates for this degree must hold the degree of A.B., based upon four years of work beyond secondary education, in a college which is approved by one of the regional accrediting bodies, or the equivalent of such a degree, and with academic and personal records which afford promise of competence in this area of service. The course of study will be especially useful for individuals who had one or more years of experience in religious education and desire further training. Candidates for this degree will be limited in number, and individuals interested are urged to apply for admission well in advance of the opening of the academic year. All work offered for this degree, whether in the regular year or in summer sessions, must be completed within a period of six years from the date of beginning. Only

a limited amount of work may be taken in the Duke University Summer Session.

Certain prerequisite studies must have been taken by the candidate during the course of his academic training or must be secured, without credit toward the M.R.E. degree, after being admitted to the Divinity School. These are the following:

General Psychology	6 s.h.
Sociology, or approved equivalent	6 s.h.
Biblical Studies (including work in both the Old and the New Testament)	6 s.h.

Thirty semester hours of academic work are required for graduation. Eighteen of the semester hours must be in the following fields:

Religious Education	6 s.h.
Psychology of Religion	3 s.h.
Christian Ethics, or History of Religions	3 s.h.
Biblical Studies	6 s.h.

The candidate must also engage in practice teaching in a church school or undertake some other approved project and must submit a written report covering his practical experience. This project work and report will be under the supervision of the Department of Religious Education.

# Courses of Instruction<sup>\*</sup>



UNLESS otherwise indicated odd numbers indicate fall semester courses; even numbers indicate spring semester courses. Required courses of the Core Curriculum and Senior Seminars are numbered from 11 to 99. Elective courses carrying credit in the Divinity School only are numbered from 101 to 199. Courses approved for credit in both the Divinity School and the Graduate School of Arts and Sciences are numbered above 200. Lists of courses to be offered in any semester will be available at the time of each registration.

## *I. Biblical Studies*

### OLD TESTAMENT

11. (Formerly 203.) INTRODUCTION TO THE OLD TESTAMENT.—The origin, literary forms, and contents of the books of the Old Testament in their geographical and historical setting. 4 s.h. MR. STINESPRING

12. (Formerly 204.) PSALMS, WISDOM LITERATURE, AND THE PROBLEM OF THEODICY.—2 s.h. MR. BROWNLEE

201-202. FIRST HEBREW.—The principles and structure of the Hebrew language with translation of selected Old Testament narratives. 6 s.h. MR. STINESPRING

205-206. ARABIC.—Introduction to the classical language and literature with some attention to the modern idiom. No prerequisite, but one year of Hebrew recommended as preparation. 6 s.h. MR. STINESPRING

207-208. SECOND HEBREW.—Samuel or Kings the first semester and Isaiah the second. 6 s.h. MR. BROWNLEE

301. THE RELIGIOUS THOUGHT OF POST-EXILIC JUDAISM.—A study of the development of religious ideas in Post-Exilic Judaism. Prerequisite: O.T. 11. 3 s.h. MR. BROWNLEE

304. ARAMAIC.—A study of the Aramaic portions of the Old Testament, and selected passages from the Targums, Midrashes, and Talmuds. 3 s.h. MR. STINESPRING

305. THIRD HEBREW.—A study of the late Hebrew prose, with readings from Chronicles, Ecclesiastes, and the Mishnah. 3 s.h. MR. BROWNLEE  
[Offered in the second semester]

306. ADVANCED HEBREW.—A course on the Dead Sea Scrolls. 3 s.h. MR. BROWNLEE

307. SYRIAC.—A study of the script and grammar, with readings from the Syriac New Testament and other early Christian documents. Some knowledge of Hebrew and Aramaic prerequisite. 3 s.h. MR. STINESPRING

\* On recommendation of the Dean, courses offered in the Graduate School of Arts and Sciences other than those approved for credit in the Divinity School may be approved for credit in individual cases, provided no equivalent course is offered in the Divinity School; each case to be decided on its merits.



309. HISTORY OF THE ANCIENT NEAR EAST.—A specialized study of the civilizations of Egypt, Palestine, Syria, and Mesopotamia in light of Biblical archaeology. 3 s.h. MR. STINESPRING

310. OLD TESTAMENT PROPHECY.—The prophetic movement in Israel with special emphasis on prophets of the eighth century B.C. Prerequisite: O.T. 11. 3 s.h. MR. STINESPRING

\*HISTORY OF ART 215. RELIGIOUS ART OF THE ANCIENT NEAR EAST.—The development of art, particularly architecture and sculpture, as the material expression of religious ideas in Egypt, Mesopotamia, and in part Syria and Palestine to the Persian conquest. 3 s.h. MR. MARKMAN

\*HISTORY OF ART 216. RELIGIOUS ART OF THE CLASSICAL WORLD.—The religious art, particularly architecture and sculpture, of Greece and Rome with special emphasis on the monuments in the Near East. 3 s.h. MR. MARKMAN

## NEW TESTAMENT

18. (Formerly 213.) EARLY CHRISTIAN LIFE AND LITERATURE.—A basic study of the civilization in which Christianity began; the origin and development of the Christian Church and its literature through the second century. 4 s.h.

MR. CLARK

19. (Formerly 214.) INTRODUCTION TO NEW TESTAMENT THEOLOGY.—A constructive analysis and exposition of the positive doctrinal content of the New Testament. Prerequisite: N.T. 18. 2 s.h.

MR. DAVIES

103-104. (Formerly 211-212.) HELLENISTIC GREEK.—Designed for beginners to enable them to read the Greek New Testament. 6 s.h., provided the student takes three additional semester hours in New Testament Greek.

MR. EDWARDS

105. (Formerly 219.) LIFE OF PAUL.—A study of Paul's life on the basis of Acts and the letters of Paul, emphasizing the permanent values in Paul's work and his contribution to the world. 3 s.h.

MR. MYERS

109. (Formerly 216.) HISTORY OF THE ENGLISH BIBLE.—A general study of the history of the English version with comparison and evaluation of the numerous contemporary translations. This development will be illustrated from the Divinity School Bible collection, with access to and examination of the original editions. 3 s.h.

MR. CLARK

217. THE NEW TESTAMENT IN GREEK.—Extensive reading of the Greek text of the New Testament with special emphasis upon its interpretation. Prerequisite: six semester hours' study of the Greek language. 3 s.h.

MR. CLARK

218. GALATIANS AND I CORINTHIANS.—A detailed study of two of Paul's major epistles. The course will be based on the Greek text. Prerequisite: six semester hours' study of the Greek language. 3 s.h.

MR. CLARK

220. I PETER AND THE GOSPEL OF JOHN.—A detailed study of two of the non-Pauline writings of the New Testament. The course will be based on the Greek text. Prerequisite: six semester hours' study of the Greek language. 3 s.h.

[Offered in the first semester]

MR. DAVIES

311. THE LIFE AND TEACHINGS OF JESUS.—Prerequisite: N.T. 18. 3 s.h.

MR. CLARK

312. ADVANCED NEW TESTAMENT THEOLOGY.—An examination of the central aspects of New Testament Theology. Prerequisite: N.T. 19. 3 s.h.

[Offered in the first semester]

MR. DAVIES

313. APOSTOLIC FATHERS.—A study of the Christian development from Clement of Rome to Polycarp, with readings in the Greek text. Prerequisite: N.T. 18. 3 s.h.

MR. CLARK

\* Course offered in the Graduate School of Arts and Sciences which is credited toward the degree of Bachelor of Divinity.

314. (Formerly 317.) **PATRISTIC THOUGHT.**—A study of the development of early Christian doctrine to the period of Irenaeus. Prerequisite: N. T. 19. 3 s.h.  
MR. DAVIES

316. **HELLENISTIC RELIGIONS.**—A study of the Gentile religions in the Roman Empire, at the beginning of the Christian era. Prerequisite: N.T. 18. 3 s.h.  
MR. CLARK

317. (Formerly 320.) **THE SYNOPTIC GOSPELS.**—A detailed study of their characteristics and contents, with attention to their respective sources and to the development of synoptic criticism. Prerequisite: N.T. 18. 3 s.h.  
MR. CLARK

318. **TEXT OF NEW TESTAMENT.**—A study of the materials for the reconstruction of the text, the principles of textual criticism, and the history of the text. Practical exercises in the use of manuscripts and facsimiles will be given. Prerequisite: N.T. 18 and a reading knowledge of Greek. 3 s.h.  
MR. CLARK

319. **PAUL AND RABBINIC JUDAISM.**—A special study of the relation of Judaism and early Christianity. 3 s.h.  
MR. DAVIES  
[Offered in the second semester]

\***GREEK 257.**—The social and cultural history of the Hellenistic world from Alexander to Augustus. 3 s.h.  
MR. ROGERS

\***LATIN 258.**—The social and cultural history of the Graeco-Roman world. 3 s.h.  
MR. ROGERS

## *II. Historical Studies*

### HISTORY OF RELIGION AND MISSIONS

15. (Formerly 281.) **LIVING RELIGIONS OF THE WORLD.**—A survey of the religious systems of India, China, and Japan, followed by a study of Judaism, Mohammedanism, and Christianity, the object being to trace the historical development of each religion. 3 s.h.  
MR. CANNON

24. (Formerly 282.) **MISSIONS.**—The history and philosophy of the missionary enterprise. 2 s.h.  
MR. CANNON

108. (Formerly 284.) **COMPARATIVE RELIGION I.**—The ideas of God, sin, and salvation in the religions of the world. Prerequisite: H.R. 15. 3 s.h.  
MR. CANNON

110. (Formerly 286.) **COMPARATIVE RELIGION II.**—Ideas of the future life and ethical and social ideas in the religions of the world. Prerequisite: H.R. 15. 3 s.h.  
MR. CANNON

112. (Formerly 288.) **THE RELIGIONS OF INDIA.**—A study of present-day religious movements in India, with special reference to Hinduism. 3 s.h.  
MR. CANNON

113. (Formerly 283.) **THE RELIGIONS OF THE FAR EAST.**—A study of the religious systems of China and Japan. 3 s.h.  
MR. CANNON

115. (Formerly 289.) **BUDDHISM.**—India at the rise of Buddhism. Life of the Buddha and the teachings of early Buddhism. Development into the Hinayana and Mahayana schools, its spread and present condition in southern and eastern Asia. Prerequisite: H.R. 15. 2 s.h.  
MR. CANNON

117. (Formerly 287.) **MOHAMMEDANISM.**—The life of Mohammed and the religion of Islam, special attention being given to the Koran and its teachings. The aim is to interpret Mohammedanism as a force today. Prerequisite: H.R. 15. 2 s.h.  
MR. CANNON

\* Course offered in the Graduate School of Arts and Sciences which is credited toward the degree of Bachelor of Divinity

## CHURCH HISTORY

13. (Formerly 233.) HISTORY OF THE PRE-REFORMATION CHURCH.—A survey to the sixteenth century in terms of spiritual genius, organizational development, great literature, and representative movements. 4 s.h. MR. PETRY

14. (Formerly 234.) HISTORY OF THE REFORMATION AND POST-REFORMATION CHURCH.—Selected studies in the evangelical revival of Luther, Calvin, and the English Reformers, as related to the Catholic Counter-Reformation and the contemporary European church. 2 s.h. MR. SCHAFER

136. (Formerly 337.) PRE-REFORMATION PREACHING.—Sermons, handbooks, and other historical sources studied in relation to Biblical preaching and the liturgical church, the problem of popular ministry and the issues of Christian reform. Prerequisite: C.H. 13. 2 s.h. MR. PETRY

137. (Formerly 336.) RELIGIOUS LEADERS IN CHRISTIAN HISTORY.—Representative leaders in the early and medieval church studied in relation to contemporary churchmanship. Prerequisite: C.H. 13. 2 s.h. MR. PETRY

138. GREAT BOOKS IN CHRISTIAN HISTORY.—An intensive study of Augustine's *Confessions*, Thomas à Kempis' *Imitation of Christ*, Erasmus' *Complaint of Peace*, Luther's *Christian Liberty*, Calvin's *Instruction in Faith*, and Andrewes' *Private Devotions*. 3 s.h. MR. PETRY

139. (Formerly 339.) METHODISM.—A study of Methodist societies in England and the developing church in America as they gave rise to such historic issues as polity, education, division, and reunion. Prerequisite: C.H. 13. 2 s.h. [Offered in the second semester] MR. PETRY

198. THE HERITAGE OF THE REFORMATION.—A historical consideration of the Protestant tradition in relation to the life and thought of the modern church. 3 s.h. MR. SCHAFER  
[Offered in the first semester]

330. THE CHURCH IN EUROPE SINCE 1800.—Emphasis is placed on the relation of the church to the social, economic, and political life of Modern Europe. Particular attention is given to Papal pronouncements on social issues, the relationship of Eastern to Western institutions, and ecclesiastical historiography as it involves source editions, periodicals, and ecumenical literature. 3 s.h. MR. PETRY

331. THE SOCIAL MESSAGE OF THE EARLY AND MEDIEVAL CHURCH.—A study of the social teachings and contributions of the Christian church prior to the Protestant Reformation. Prerequisite: C.H. 13 and 14. 3 s.h. MR. PETRY

332. THE MEDIEVAL CHURCH.—Outstanding characteristics of the medieval church, emphasizing theory, polity, institutions, sacraments, and worship. Prerequisite: C.H. 13 and 14. 3 s.h. MR. PETRY

334. CHURCH REFORMERS AND CHRISTIAN UNITY.—The work of such reformers as Marsilius of Padua, William of Ockham, John Gerson, Pierre d'Ailly and Nicholas of Cusa in relation to ecclesiastical schism and the search for Christian unity through representative councils. Prerequisite: C.H. 13 and 14. 3 s.h. MR. PETRY

336. (Formerly 333.) A HISTORY OF CHRISTIAN RENUNCIATION IN THE MIDDLE AGES.—A study of the renunciatory ideal and of spiritual practices with special reference to Benedictines, Franciscans, Lowland mystics, and leading seculars. Prerequisite: C.H. 13 and 14. 3 s.h. MR. PETRY

## AMERICAN RELIGIOUS THOUGHT

28. (Formerly 296.) MOVEMENTS IN AMERICAN RELIGIOUS THOUGHT.—Beginning with the English Reformation, this course introduces the leading types of Protestantism transplanted to or developed within colonial America, primary emphasis being placed upon the dominant modes of Christian thought. 3 s.h. MR. SMITH

199. THE AMERICAN SOCIAL GOSPEL.—A study of Protestant social thought and action in America since 1865. 3 s.h. MR. SMITH

395. RELIGIOUS THOUGHT IN COLONIAL AMERICA.—Consideration of the principal types of Protestant thought in colonial culture. 3 s.h. MR. SMITH

396. AMERICAN RELIGIOUS THOUGHT IN THE NINETEENTH CENTURY.—Comparative exposition of Orthodoxy and Liberalism. 3 s.h. MR. SMITH

397. CURRENT AMERICAN THEOLOGY.—Critical appraisal of conflicting tendencies in American theological thought. 3 s.h. MR. SMITH

398. MODERN AMERICAN CHRISTOLOGY.—An analysis of the historical development of modern American conceptions of the person and work of Christ. 3 s.h. MR. SMITH

495. SEMINAR: JONATHAN EDWARDS AND JOHN WESLEY.—A comparative study of the major theological writings of Edwards and Wesley. 2 s.h. MR. SMITH

498. SEMINAR: REINHOLD NIEBUHR AND PAUL TILLICH.—An analysis and appraisal of the theological thought of Niebuhr and Tillich. 2 s.h. MR. SMITH

### *III. Theological Studies*

#### PHILOSOPHY OF RELIGION

119. (Formerly 229.) INTRODUCTION TO PHILOSOPHY OF RELIGION.—A general course; introduction to major philosophies of religion; relation to science, philosophy, art, morality, and tradition; criteria of validity, formulation of a philosophy of religion. 2 s.h.

121. PHILOSOPHY OF CONTEMPORARY THEISM.—A general course: the various forms of contemporary theism will be studied and evaluated. 2 s.h.

122. THE PHILOSOPHY OF NATURALISTIC THEISM.—A seminar; a study of the metaphysics, epistemology, logic, and theory of value of the most recent attempt to formulate a structure of Christian theism. Prerequisite: consent of instructor. 2 s.h.

123. THEORIES OF VALUE: A GENERAL COURSE.—A comparative study of the major theories of value advanced in contemporary philosophy. 2 s.h.

124. THE PHILOSOPHY OF PERSONALISM.—A seminar; a study of the metaphysics, epistemology, logic, and theory of value of the personalist tradition in Christian thought. Prerequisite: consent of instructor. 2 s.h.

382. RELIGIOUS KNOWLEDGE.—A seminar; a critical investigation of the source, nature, and validity of religious knowledge involving reference to the relation of revelation to reason and scientific methodology in knowledge. Prerequisite: P.R. 119 or consent of instructor. 2 s.h.

#### CHRISTIAN THEOLOGY

20. (Formerly 221.) INTRODUCTION TO CHRISTIAN THEOLOGY.—Contemporary theological tendencies, method and theory of knowledge, and introductory interpretation of the principal tenets of the Christian faith. 4 s.h. MR. CUSHMAN

21. (Formerly 222.) INTRODUCTION TO THE HISTORY OF CHRISTIAN DOCTRINE.—The chief theological controversies, church creeds and confessions in the history of Christian thought from the anti-gnostic fathers to the year 1576. Prerequisite: C.T. 20. 2 s.h. MR. SCHAFER



107. (Formerly 329.) **THE PERSON AND WORK OF CHRIST.**—An intensive examination of classical types of Christological and soteriological formulation in the history of Christian reflection, assessment and constructive position. Prerequisite: C.T. 20. 2 s.h. MR. CUSHMAN

129. **SEMINAR IN HISTORICAL THEOLOGY.**—Selected problems in the history of Christian theology. Prerequisite: C.T. 21. 2 s.h. MR. SCHAFER  
[Offered in the second semester]

224. (Formerly 323.) **CONCEPTIONS OF MAN IN WESTERN THOUGHT.**—An analysis and interpretation of important types of philosophical and theological theory concerning man with a view to critical evaluation and construction. Prerequisite: 3 s.h. in Christian Doctrine or 6 s.h. in Philosophy. MR. CUSHMAN

321. **PLATONISM AND CHRISTIANITY.**—An analysis of Plato's religious philosophy and a survey of its continuing influence in Hellenistic and Christian thought. Prerequisite: permission of instructor. 3 s.h. MR. CUSHMAN

322. **THEOLOGY AND PHILOSOPHY IN THE NINETEENTH CENTURY.**—A study of Protestant thought from Schleiermacher to Troeltsch together with representative theologians of Britain, with special attention to the reciprocal relations between theology and metaphysics. Prerequisite: C.T. 20. 3 s.h. MR. CUSHMAN

323. **HISTORY OF CHRISTIAN THOUGHT I.**—An historical study of theology in the ancient and medieval church. 3 s.h. MR. SCHAFER

324. **HISTORY OF CHRISTIAN THOUGHT II.**—An historical study of theology from the Reformation. 3 s.h. MR. SCHAFER

325. **PHILOSOPHICAL THEOLOGY I.**—Analysis and critique of dominant types of contemporary world-views for the formulation of the problem of philosophical theology. Main problems in the history of philosophical theology. Prerequisite: C.T. 20. 3 s.h. MR. CUSHMAN

326. **PHILOSOPHICAL THEOLOGY II.**—Historical and constructive approach to the problem of faith and reason, God and evil. 3 s.h. MR. CUSHMAN

328. (Formerly 321B.) **SEMINAR IN TWENTIETH-CENTURY CONTINENTAL AND BRITISH THEOLOGY.**—Critical examination of the thought of Barth, Brunner, Berdyaev, Maritain, F. R. Tennant, and William Temple. 3 s.h. MR. CUSHMAN

See also **NEW TESTAMENT 312.—ADVANCED NEW TESTAMENT THEOLOGY.**

## CHRISTIAN ETHICS

27. (Formerly 291.) **CHRISTIAN ETHICS I.**—The central assumptions and principles of the Christian conception of the good life. 3 s.h. MR. BEACH

114. (Formerly 292.) **CHRISTIAN ETHICS II.**—The application of Christian ethics to life in modern society with particular emphasis on the ethical problems of the typical American community. Prerequisite: C.E. 27. 2 s.h. MR. BEACH

193. **THE CHRISTIAN INTERPRETATION OF HISTORY.**—A comparative examination of the chief secular and Christian theories of history current in Western thought. For advanced students. Prerequisite: C.E. 27. 3 s.h. MR. BEACH

391. **HISTORICAL TYPES OF CHRISTIAN ETHICS I.**—A critical study of representative documents of Christian ethical theory, up to the Reformation. Prerequisite: C.E. 27 or its equivalent. 3 s.h. MR. BEACH

392. **HISTORICAL TYPES OF CHRISTIAN ETHICS II.**—A continuation of C.E. 391, covering the Reformation and current Christian ethical theory. Prerequisite: C.E. 391. 3 s.h. MR. BEACH



394. CHRISTIANITY AND THE STATE.—The relation of the Christian theory of the State to political problems with special consideration of the religious assumptions underlying democratic theory and practice. Prerequisite: C.E. 27. 3 s.h.

MR. BEACH

\*238. RACE AND CULTURE.

MR. THOMPSON

\*249. CHILD WELFARE.

MR. JENSEN

\*250. MARRIAGE AND THE FAMILY.

MR. HART

\*276. CRIMINOLOGY.

MR. JENSEN

\*382. HISTORY OF SOCIOLOGICAL THEORY.

MR. JENSEN

### PSYCHOLOGY OF RELIGION

22. (Formerly 271.) PSYCHOLOGY OF RELIGION.—An analysis of the major factors in religious experience. 3 s.h.

MR. HICKMAN

125. (Formerly 272.) ADVANCED PSYCHOLOGY OF RELIGION.—An intensive study of the foundations and presuppositions of religious experience. 3 s.h.

MR. HICKMAN

127. (Formerly 373.) PSYCHOLOGY OF PREACHING.—A psychological study of the preaching motive and preaching relationships. 2 s.h.

MR. HICKMAN

128. (Formerly 374.) PASTORAL PSYCHOLOGY.—Study of psychological problems and principles involved in pastoral work. 2 s.h.

MR. HICKMAN

129. (Formerly 375.) GENETIC PSYCHOLOGY OF RELIGION.—A study of the religious experience of childhood and youth. 3 s.h.  
[Offered in the second semester]

MR. HICKMAN

130. (Formerly 376.) STUDIES IN MYSTICISM.—An examination of the mystical aspect of religious experience. 3 s.h.  
[Offered in the first semester]

MR. HICKMAN

### *IV. Practical Studies*

The Core Curriculum sequence, Consolidated Course in Christian Leadership, comprises the following courses in the Division of Practical Studies, each of which is listed in its appropriate department:

P.T. 23. CHURCH ADMINISTRATION I.—2 s.h.

R.E. 25. EDUCATIONAL THEORY AND PRACTICE IN THE CHURCH.—2 s.h.

H.R. 24. MISSIONS.—2 s.h.

P.C. 26. INTRODUCTION TO PASTORAL CARE.—2 s.h.

### PRACTICAL THEOLOGY

23. (Formerly 252.) CHURCH ADMINISTRATION I.—An introduction to the administrative and supervisory procedure essential in the total work of the church. 2 s.h.

MR. WALTON

142. (Formerly 253.) FIELD WORK I—GENERAL.—A course designed to help with personal and parish problems, and the techniques of successful service. 1 s.h. (Note: All students engaged in any type of field work are required to take this course, or 144, Field Work II, or 146, Field Work III.)

MR. WALTON

\* Course offered in the Graduate School of Arts and Sciences which is credited toward the degree of Bachelor of Divinity. For a description of the course, see the catalogue of the Graduate School.

144. (Formerly 254.) **FIELD WORK II—RURAL.**—This course is designed to prepare students for work in rural churches. It emphasizes the training values in field work. 1 s.h. MR. WALTON

145. **FIELD WORK—URBAN.**—This course is designed to prepare students for work in urban churches. It is planned to help the student fit into the urban situation and to gain the most from his field work. 1 s.h.

146. **CHURCH ADMINISTRATION II.**—This course considers the principles of program planning, policy development, and leadership enlistment and training in the church. 2 s.h. MR. WALTON

147. **THE URBAN COMMUNITY AND ITS CHURCH.**—A study of the urban community and the church in its midst. 2 s.h.

148. **CHURCH FINANCE.**—A seminar to consider the principles of budget making, stewardship instruction, and every member enlistment in church support. 1 s.h. MR. WALTON

149. **PARISH AND COMMUNITY RESEARCH AND ANALYSIS.**—A seminar to consider the techniques of community surveys, research, and analysis. Attention is given to the use of research data in program planning and in checking on the effectiveness of church work. 1 s.h. MR. WALTON

150. **THE RURAL PASTOR AND HIS WORK.**—A study of the qualifications of the rural pastor and his task. Attention is given to the supervisory methods and materials available for the pastor's use. 2 s.h. MR. WALTON

151. (Formerly 353.) **THE RURAL CHURCH.**—A study of rural conditions and the place of the church as a community institution. 2 s.h. MR. WALTON

152. (Formerly 354.) **PARISH EVANGELISM.**—A study seeking to prepare the student to plan a comprehensive and continuous program of evangelism for the local church. 2 s.h. MR. WALTON

153. **CHURCH MANAGEMENT AND SUPERVISION.**—A seminar to consider problems and situations met in local church management and supervision. 1 s.h. MR. WALTON

154. (Formerly 356.) **THE URBAN CHURCH.**—A study of the functions of the church in towns and cities with special attention to changing city conditions. 2 s.h.

155. (Formerly 357.) **CHURCH POLITY: COMPARATIVE AND DENOMINATIONAL.**—This is a study of the polity of the different denominations in which the students may serve, based upon the disciplines and practices of the respective denominations. 2 s.h. MR. WALTON AND OTHERS

(The plan of this course is for the class to meet as a unit one hour a week for the study of the common interests of the denominations; for the other hour the class is divided into groups on the following plan:

- a. **THE POLITY OF THE METHODIST CHURCH.**—The study will be based upon the Methodist Discipline.
- b. **THE POLITY OF THE BAPTIST CHURCHES.**
- c. **THE POLITY OF THE CONGREGATIONAL-CHRISTIAN CHURCHES.**
- d. **THE POLITY OF THE PRESBYTERIAN CHURCHES.**

Courses in the polity of other churches will be arranged as needed.)

157. **RURAL COMMUNITY AND CHURCH TRENDS.**—A seminar to evaluate the current trends in rural life and their influence upon church work. 1 s.h.

MR. WALTON

## RELIGIOUS EDUCATION

25. (Formerly 261.) EDUCATIONAL THEORY AND PRACTICE IN THE CHURCH.—An over-all and introductory view of the educational functions of the church. Consideration is given to the work of organization, administration and supervision of the church school. 2 s.h. MR. SPENCE

161. THEORIES, TYPES AND TECHNIQUES OF TEACHING.—A study of the main principles underlying religious teaching with an examination of the different methods of teaching. 2 s.h. MR. SPENCE

162. (Formerly 262.) METHODS AND MATERIALS OF RELIGIOUS EDUCATION.—A consideration of the principal administrative problems of the church school, of the various concepts of the curriculum, and an examination of existing curricula, their nature, use and value. 3 s.h. MR. SPENCE

163. (Formerly 363.) WORSHIP AND DRAMA.—Worship in its bearings upon the educational functions of the Christian religion. The use of drama in religious education with the creation of dramatic programs of worship and drama writing and production. 3 s.h. MR. SPENCE

164. RELIGIOUS EDUCATION OF CHILDREN AND ADOLESCENTS.—The course will consider religious education of children and youth on the various age levels from the nursery school through high school. 2 s.h. MR. SPENCE

166. RELIGIOUS EDUCATION OF YOUNG PEOPLE AND ADULTS.—This course will be concerned with a study of young people as well as mature persons from a standpoint of meeting their needs and continuing their religious development. 2 s.h. MR. SPENCE

168. (Formerly 366.) THE EDUCATIONAL AND SPIRITUAL VALUES OF GREAT LITERATURE.—A study of Biblical and other great literature from the standpoint of their teaching values; analysis of material with reference to needs, interests, and capacities of various age groups. Correlation of Biblical and extra-Biblical material with a view to its adaptability for teaching and preaching purposes. 3 s.h. MR. SPENCE

365. HISTORY OF RELIGIOUS EDUCATION IN MODERN TIMES.—A critical study of the historical movements in religious education since the Reformation with special consideration of the American development. 3 s.h. MR. SPENCE

368. THEORIES OF RELIGIOUS EDUCATION.—A critical investigation of current theories of Religious Education. 3 s.h. MR. SPENCE

## PASTORAL CARE

26. (Formerly 251.) INTRODUCTION TO PASTORAL CARE.—A study of the background, needs and methods of pastoral work and personal counseling. 2 s.h. MR. DICKS

170. SEMINAR IN PASTORAL CARE.—For students preparing for full-time pastoral ministry, hospital chaplaincy, industrial chaplaincy, ministry to older people, or work with young people. Practicum. Prerequisite: P.C. 26 or consent of instructor. 3 s.h. MR. DICKS  
[Offered second semester]

171. (Formerly 255.) PASTORAL CARE PRACTICUM I.—A study of pastoral calls and interviews. Particularly for students serving churches or working in clinical situations. Prerequisite: P.C. 26 or consent of instructor. 3 s.h. MR. DICKS

172. (Formerly 256.) PASTORAL CARE PRACTICUM II.—Advanced pastoral care for students serving churches or working in clinical situations. Prerequisite: P.C. 26 or P.C. 171. 3 s.h. MR. DICKS

173. RELIGION AND HEALTH.—The study of the relation of body and mind and of the religious resources for health through counseling and worship. Prerequisite: P.C. 26 or consent of instructor. 2 s.h. MR. DICKS

174. PERSONAL COUNSELING.—A study of formal personal counseling for those going into the ministry, religious education, and work with college students. 2 s.h. MR. DICKS

175. (Formerly 351.) THE LITERATURE OF PASTORAL CARE.—Directed reading and seminar discussion of writings in the field of psychiatry, psychology, sociology, social work, the ministry, and other fields as they relate to pastoral care. Prerequisite: consent of instructor. 2 s.h. MR. DICKS

176. PASTORAL CARE AND SOCIAL WORK.—Lectures by various specialists and visits to social agencies to orient the minister in relation to other specialists working with individuals and to familiarize him with social service resources. 2 s.h. (Open to a limited number of first-year men.) MR. DICKS  
[Offered in the first semester]

177. ADVANCED SEMINAR IN PASTORAL CARE.—Continuation of 170, which, however, is not a prerequisite. Practicum. Prerequisite: P.C. 26 or consent of instructor. 3 s.h. MR. DICKS  
[Offered in the second semester]

## PREACHING

29-30. SERMON CONSTRUCTION—THEORY AND PRACTICE.—An investigation of the theory of practicing (first semester). Detailed work in practice preaching and a clinical session each week on the application of theory (second semester). 4 s.h. MR. CLELAND AND MR. DUNN

181. (Formerly 244.) PRACTICAL PROBLEMS IN PREACHING.—Analysis of selected sermons and discussion of problems facing the preacher in the pulpit. Prerequisite: Pr. 29 and 30. 2 s.h. MR. CLELAND

183. (Formerly 346.) MATERIALS OF PREACHING—BIBLICAL.—The problem of authority in the Bible and an evaluation of selected portions of the Bible for present-day preaching. 2 s.h. MR. CLELAND

185. (Formerly 348.) MATERIALS OF PREACHING—NON-BIBLICAL.—An evaluation of great literature—drama, poetry, biography, fiction—from the point of view of its value for modern preaching. 2 s.h. MR. CLELAND

See also: C.H. 136. PRE-REFORMATION PREACHING.  
Psy.R. 127. PSYCHOLOGY OF PREACHING.

## PUBLIC WORSHIP

178. (Formerly 355.) PUBLIC WORSHIP.—The theory and practice of the worship of the Church: an analysis of the rites and ceremonies in "The Book of Worship." 3 s.h. MR. CLELAND AND MR. RUDIN

180. (Formerly 358.) CHURCH MUSIC.—A study of hymnology, song leading, and problems of the modern church choir. 2 s.h. MR. BARNES

## SPEECH

(Four Sections)

17. (Formerly 241.) EFFECTIVE SPEAKING.—Fundamentals of preparation and delivery to develop effectiveness in private and public speech. Individual conferences. (Students electing Vocational Group I will, upon recommendation of the instructors in Preaching and Speech, take Speech 132 also.) 2 s.h. MR. RUDIN

132. (Formerly 242.) PUBLIC SPEAKING.—Composition and delivery, based upon individual needs. Selection and arrangement of materials, principles of persuasion, intensive practice in delivery. Individual conferences. 2 s.h. MR. RUDIN

134. (Formerly 246.) ORAL INTERPRETATION OF LITERATURE.—A course for advanced students designed to develop effectiveness in interpreting the Bible and other commonly used materials of public worship. Individual conferences and drill sections to be arranged. Prerequisite: Speech 17. 2 s.h. MR. RUDIN



## *V. Senior Seminars*

In the third year each B.D. candidate will take one Senior Seminar, yielding 2 s.h. credit. No student may enroll in more than one Senior Seminar without special permission of the Dean. Juniors and Middlers are not eligible for credit. Senior Seminars will not yield Graduate School credit.

Enrollment in each Senior Seminar shall be normally not more than twelve. No Senior Seminar need be conducted for an enrollment of less than 5 students. Each Senior Seminar will be in charge of a Chairman. Not less than two instructors will participate in each Seminar. General supervision of all Senior Seminars will be exercised by a standing committee of the Faculty.

The work done in each Senior Seminar should be equivalent to that done in a normal 2 s.h. course, with reading based upon a prepared reading list and a substantial paper or written project report.

### FIRST SEMESTER

- 61. THE CHRISTIAN FAITH AND ITS PROCLAMATION.—2 s.h.  
Mr. CLELAND, MR. BEACH, MR. RUDIN
- 63. THE ECUMENICAL MOVEMENT IN THE MODERN CHURCH.—2 s.h.  
MR. SMITH, MR. CANNON, MR. SCHAFER
- 65. PRACTICAL VALUES OF BIBLICAL RESEARCH.—2 s.h.  
MR. CLARK, MR. BROWNLEE
- 67. THE NEW TESTAMENT AS MATERIALS FOR TEACHING.—2 s.h.  
MR. SPENCE, MR. DAVIES, MR. DICKS

### SECOND SEMESTER

- 62. WESTERN CHRISTIANITY AND NON-CHRISTIAN FAITHS.—2 s.h.  
MR. PETRY, MR. CANNON, MR. SCHAFER
- 64. THE OLD TESTAMENT AS MATERIALS FOR TEACHING.—2 s.h.  
MR. SPENCE, MR. STINESPRING
- 66. THE CHRISTIAN CHURCH AND SOCIAL CHANGE.—2 s.h.  
MR. BEACH, MR. SMITH, MR. PETRY
- 68. CHRISTIAN EXPERIENCE AND CONTEMPORARY CHURCH LIFE.—  
2 s.h. MR. HICKMAN, MR. WALTON, MR. MYERS



# Enrollment 1950-1951



Allred, Garland Howard (A.B., Guilford College), Greensboro, N. C.  
 Alsbaugh, Carlton Gaither, Jr. (A.B., High Point College), Winston-Salem, N. C.  
 Anderson, James Harold (B.A., Wake Forest College), Mars Hill, N. C.  
 Andrews, James David (B.S., University of North Carolina), Goldsboro, N. C.  
 Atkins, John Payne (B.A., Millsaps College), Columbus, Miss.  
 Austin, Harold Covington (A.B., High Point College), High Point, N. C.  
 Bailey, Daniel Edwin (A.B., Catawba College), Albemarle, N. C.  
 Ballentine, Wyman Wayne (B.S., Clemson A. & M. College), Blythewood, S. C.  
 Barefield, Robert Stanhope (B.S., Alabama Polytechnic Institute), Aberdeen, N. C.  
 Barlow, Hubert Lee (B.A., Millsaps College), Wesson, Miss.  
 Bass, Walton Needham (A.B., Wofford College), Goldsboro, N. C.  
 Bauer, Eugene Joseph (A.B., Duke University), Chicago, Ill.  
 Beane, Kenneth Eugene (A.B., High Point College), Siler City, N. C.  
 Bedenbaugh, Kenneth Wilson (B.S., Wofford College), Chesterfield, S. C.  
 Bennett, Erman Fay (B.S., College of the Ozarks), Clarksville, Ark.  
 Bennett, Harold Clark (B.A., Wake Forest College), Asheville, N. C.  
 Bennett, William Leffis (B.A., Wake Forest College; M.A., Duke University), Shallotte, N. C.  
 Bigelow, Ralph Jordan (B.S., University of South Carolina), North Charleston, S. C.  
 Bizzell, Henry Arthur, Jr. (A.B., Duke University), Newton Grove, N. C.  
 Boggs, Clyde Stewart (A.B., Kentucky Wesleyan; B.D., Duke Divinity School), Durham, N. C.  
 Boulton, Edwin Charles (B.A., William Jewell College), St. Joseph, Mo.  
 Brogan, Wesley Gamble (A.B., Dickinson College), Wilmington, Del.  
 Brown, Chester Darrol (A.B., High Point College), High Point, N. C.  
 Brown, James Collins Parker (A.B., High Point College), Lasker, N. C.  
 Burks, Peter Talmadge (A.B., University of North Carolina), Chapel Hill, N. C.  
 Bush, Warren Thomas (B.S., Wake Forest College), Roanoke Rapids, N. C.  
 Cahow, Clark R. (A.B., Duke University), Durham, N. C.  
 Caldwell, Ralph Martin (B.S., Davidson College), Spartanburg, S. C.  
 Carpenter, James Anderson (A.B., Wofford College), Shelby, N. C.  
 Carraway, Ray Edward (A.B., Atlantic Christian College), Snow Hill, N. C.  
 Casey, Joseph Howard (A.B., Harvard University), Lumberton, West Va.  
 Casper, George W. (A.B., Heidelberg College), Canton, Ohio.  
 Caudill, Clarence Jack (A.B., University of Tennessee), Millers Creek, N. C.  
 Chamblee, Arthur L., Jr. (A.B., Piedmont College), Winston-Salem, N. C.  
 Chang, Timothy (B.S., Fukien Christian University), Fukien, China.  
 Charlton, David Wayland, Jr. (B.A., Randolph-Macon College), Manteo, N. C.  
 Christenberry, Daniel Keener, Jr. (B.S., Alabama Polytechnic Institute), Stewart, Ala.  
 Clarke, Robert Gray (A.B., Miami University), Dayton, Ohio.  
 Clary, Carl Douglas (A.B., Wofford College), Gaffney, S. C.  
 Copeland, Isaac Mathias, Jr. (A.B., Duke University), Norfolk, Va.  
 Crawley, Robert Pinckney (A.B., University of North Carolina), Statesville, N. C.  
 Crook, James Rutland, Jr. (A.B., Duke University), Jacksonville, Fla.  
 Currin, Billie Ruth (A.B., Woman's College of the University of North Carolina; M.A., Columbia University), Angier, N. C.  
 Daugherty, Luby Guilford (B.A., Wake Forest College), New Bern, N. C.  
 Davies, Merlin Cleon (A.B., Morningside College), Sioux City, Iowa.  
 Davis, Herman Fred (A.B., Wofford College), Carthage, N. C.  
 Dawsey, Cyrus Bassett, Jr. (A.B., Wofford College), Madison, Fla.  
 Dennis, Billy Vernon (B.A., Hendrix College), Lexa, Ark.  
 Desrosiers, Norman Alfred (A.B., Duke University), Butner, N. C.  
 Dickson, Clarence Harley, Jr. (B.S., Davidson College), Asheville, N. C.  
 Dorr, Robert Warren (A.B., University of Maryland), Mt. Ranier, Md.  
 East, Clifford Lyle, Jr. (B.A., Randolph-Macon College), Richmond, Va.  
 Edwards, Otis Carl, Jr. (A.B., Centenary College), Shreveport, La.  
 Elgert, Charles Roger (A.B., Johns Hopkins University), Baltimore, Md.  
 Ellington, James Richard (A.B., Catawba College), Belmont, N. C.  
 Enloe, Martha Eleanor (B.S., Montreat College), Andrews, N. C.  
 Ferneyhough, William Todd (A.B., Elon College), Reidsville, N. C.  
 Ferris, Fred L. E. (A.B., Duke University), Scarsdale, N. Y.  
 Fields, Clyde Lee (A.B., Elon College), Reidsville, N. C.  
 Fike, Earle William (A.B., Bridgewater College), Circleville, W. Va.  
 Fitzgerald, Bernard Ray (A.B., Wofford College), Charlotte, N. C.  
 Fogleman, Clarence Millard, Jr. (A.B., Kansas Wesleyan University), Burlington, N. C.  
 Ford, Jesse Emerson, Jr. (A.B., Wofford College), Durham, N. C.  
 Foster, Robert A. (A.B., Johns Hopkins University), Memphis, Tenn.  
 Fowlkes, Ralph Eugene, Jr. (A.B., Marshall College), Huntington, W. Va.  
 France, Carl Gailen (A.B., Bethany College), Blackstone, Va.  
 Gardner, Robert Granville (A.B., Mercer University), Durham, N. C.  
 Garrison, John W. (A.B., Asbury College), Raleigh, N. C.

- Gatlin, Curtis Robert (B.S., Newberry College), Newberry, S. C.  
 Gibbs, James Samuel, Jr. (A.B., Wofford College), Spindale, N. C.  
 Gibson, Earl K. (A.B., Wofford College), Charlotte, N. C.  
 Gibson, Robert Stansill (A.B., Duke University), Rockingham, N. C.  
 Glasgow, Carl Edward (B.S., Cornell University; M.S., University of Rochester), Rochester, N. Y.  
 Golden, Jacob Bowles (A.B., Lenoir-Rhyne College), Hickory, N. C.  
 Groves, David Clayton (A.B., Florida Southern College), Jacksonville, Fla.  
 Hailey, James Russell (B.A., Elon College), Leaksville, N. C.  
 Hall, James Thomas (A.B., Duke University), High Point, N. C.  
 Hammersla, Edgar Ward (A.B., Western Maryland College), Martinsburg, W. Va.  
 Hardeman, Howard DeFrance (A.B., Central College), Pacific, Mo.  
 Harmon, Alonzo Lincoln (A.B., Duke University), Bluefield, W. Va.  
 Harris, Clinton Ross (A.B., Duke University), Durham, N. C.  
 Hastings, Arthur Henry (B.A., Washington College), Salisbury, Md.  
 Henley, George Gray (A.B., Hampden-Sydney College), King George, Va.  
 Higgins, James Silvester (A.B., High Point College), Guilford College, N. C.  
 Hill, Fred Adam (A.B., Catawba College), Salisbury, N. C.  
 Hinrichs, Conley Kent (B.A., Nebraska Wesleyan University), Hildreth, Neb.  
 Holler, Adlai Cornwell, Jr. (A.B., Wofford College), Myrtle Beach, S. C.  
 Horn, Kenneth Arthur (A.B., Wofford College), Upper Darby, Pa.  
 Huggins, Ernest, Jr. (A.B., The Citadel), Johnsonville, S. C.  
 Hutchinson, Louise Conrad (B.A., Queens College), Charlotte, N. C.  
 Hutchinson, Orion Neely, Jr. (A.B., Davidson College), Charlotte, N. C.  
 Jackson, Joe Hoyt (B.A., Centenary College), Shreveport, La.  
 Johnson, E. Weldon (B.A., Wake Forest College), Fayetteville, N. C.  
 Jordan, Robert Harry (A.B., High Point College), Siler City, N. C.  
 Jordan, Virginia (A.B., Morris Harvey College), Charleston, W. Va.  
 Joyce, Johnie Leroy (A.B., Duke University; M.A., University of North Carolina), Burlington, N. C.  
 Kincaid, John J. Pershing (A.B., High Point College), Seagrove, N. C.  
 Kinlaw, Dennis Franklin (A.B., Asbury College), Faison, N. C.  
 Kirby, Wallace Hines (B.S., University of North Carolina), Roxboro, N. C.  
 Kirk, Barbara Jean (B.S., East Tennessee State College), Ooltewah, Tenn.  
 Knight, Richard Orosz (A.B., Morris Harvey College), Vero Beach, Fla.  
 Lackey, John Robert (B.A., Elon College), Greensboro, N. C.  
 Laughlin, William Wesley, Jr. (A.B., West Virginia Wesleyan College), Mannington, W. Va.  
 Leatherman, Harold Franklin (A.B., Lenoir-Rhyne College), Vale, N. C.  
 Lee, Robert Edward (B.A., Randolph-Macon College), Richmond, Va.  
 Lewis, Gene Elton (B.A., Atlantic Christian College), Goldsboro, N. C.  
 Lewis, Jimmy Anfosso (A.B., Southwestern University), Luling, Texas.  
 Lock, James Sidney (B.S., Alabama Polytechnic Institute), Montgomery, Ala.  
 Lockhart, Joyce Gwendolyn (A.B., Berea College), Prairie Grove, Ark.  
 Lovelace, Marc Hoyle (A.B., High Point College; Th.M., Th.D., Southern Baptist Theological Seminary), Wake Forest, N. C.  
 Luessen, Ezra Assel (B.A., Ohio Wesleyan University), Cincinnati, Ohio.  
 McClure, Bruce Eugene (B.S., Indiana University), Princeton, Ind.  
 McCulley, Glenn Reeves (A.B., High Point College), Lenoir, N. C.  
 McKee, Robert F. (A.B., Ursinus College), Eustis, Fla.  
 McClean, Robert A. (A.B., King College), Buies Creek, N. C.  
 Mallard, William, Jr. (B.A., Randolph-Macon College), Richmond, Va.  
 Mallary, Martha Bayne (A.B., University of North Carolina), Macon, Ga.  
 Maness, Charles McKinley, Jr. (A.B., University of North Carolina), Durham, N. C.  
 Mashburn, Dwight Winfred (A.B., High Point College), Highfalls, N. C.  
 McGill, George Caskey (A.B., Tulsa University), Seminole, Okla.  
 Mitchell, Frank Joseph (B.S., Alabama Polytechnic Institute), Fairfield, Ala.  
 Moore, Joseph Charles, Jr. (A.B., Dickinson College), Mill Hall, Pa.  
 Moore, Kenneth Robbins (A.B., High Point College), Charlotte, N. C.  
 Moore, Robert Freeman (A.B., Shepherd College), Martinsburg, W. Va.  
 Moose, J. L. Walter (B.A., Wake Forest College; M.A., Wake Forest College), Statesville, N. C.  
 Montfort, Russell Thompson (A.B., Kentucky Wesleyan College), Crestwood, Ky.  
 Nagel, Herman Kyle (A.B., Southwestern University), Edna, Texas.  
 Nees, Forrest Glenn (A.B., Ohio Wesleyan University), Akron, Ohio.  
 Norton, Zane Grey (A.B., Duke University), Raeford, N. C.  
 Owen, John Malloy, III (B.S., Davidsen College), Fayetteville, N. C.  
 Owens, Charles Edward (B.S., Texas A. & M.), Brookston, Texas.  
 Park, Marvin Ross, Jr. (A.B., University of Alabama), Ralph, Ala.  
 Parker, Archie R., Jr. (B.A., Millsaps College), Columbus, Miss.  
 Payne, Don Aubrey (A.B., High Point College), High Point, N. C.  
 Peoples, Doris (B.A., Wake Forest College), Gastonia, N. C.  
 Pemberton, John, III (A.B., Princeton University), Cape May, N. J.  
 Peters, Gervaise Francis (A.B., Ohio Wesleyan University), Ashville, Ohio.  
 Pledger, Bennie Edward (B.A., Wake Forest College), Wake Forest, N. C.  
 Polley, Max Eugene (A.B., Albion College), Niles, Mich.  
 Potts, Reginald Harrell (A.B., Lake Forest College), Wilmette, Ill.  
 Prunyn, Harold Andrew (B.A., Juniata College; M.S., Pennsylvania State College), Sidney, N. Y.  
 Putnam, Ray Clayton (A.B., High Point College), Greensboro, N. C.  
 Pyatt, Clyde Dwight (A.B., Duke University), Balfour, N. C.  
 Ramsey, Vernon Jerome (A.B., Catawba College), Salisbury, N. C.  
 Randolph, Charles Wesley (A.B., Elon College), Gibsonville, N. C.

Raper, William Burkette (A.B., Duke University), Middlesex, N. C.  
 Regan, James Robert, Jr. (A.B., Duke University), Pine Bluff, N. C.  
 Rich, William Alfred (B.A., Elon College), Graham, N. C.  
 Richardson, Austin Harper (B.S., University of Minnesota), Austin, Minn.  
 Richardson, John Earl (A.B., High Point College), Eagle Springs, N. C.  
 Rush, James Wallace (B.A., Randolph-Macon College), McGaheysville, Va.  
 Schores, Daniel Mortimer, Jr. (A.B., Central College), Overland, Mo.  
 Selstad, Robert Arney (B.S., University of Houston), Houston, Texas.  
 Sexton, Kenneth Bryan (B.S., North Carolina State College), Enfield, N. C.  
 Sharpe, Lauren R. (B.A., Wake Forest College), Kenansville, N. C.  
 Shepherd, Douglas Nelson (A.B., Duke University), Huntington, W. Va.  
 Sherbert, Lloyd Leslie (B.B.A., University of Houston), Houston, Texas.  
 Shoaf, Early Clifford (A.B., High Point College), High Point, N. C.  
 Smith, Frank Ira (B.A., Syracuse University), Vernon, N. Y.  
 Smith, William Poole (B.A., Wake Forest College), Haw River, N. C.  
 Smotherman, Ernest Hermon (B.S., Middle Tennessee State Teacher's College), Chapel Hill, Tennessee.  
 Spears, Jimmie Wray (A.B., Morris Harvey College), Charleston, W. Va.  
 Squires, Donal Morley (A.B., Fairmont State College), Fairmont, W. Va.  
 Statler, Earl Gladish (A.B., Southeast Missouri State College), Millersville, Mo.  
 Steele, Thomas Fant, Jr. (A.B., Wofford College), Rock Hill, N. C.  
 Swain, David Lowry (A.B., Duke University), Asheville, N. C.  
 Taylor, Eben (A.B., Wofford College), Charleston, S. C.  
 Taylor, Kenneth Merwin (A.B., Florida Southern College), Miami, Fla.  
 Thompson, George William (A.B., High Point College), Mebane, N. C.  
 Tucker, Charles Clyde, Jr. (B.A., Randolph-Macon College), Annandale, Va.  
 Turner, Clarence Ambrose, III (B.S., Virginia Polytechnic Institute), Richmond, Va.  
 Turner, Sterling Deloy, Jr. (B.S., East Tennessee State College), Spring City, Tenn.  
 Tyson, George Hart (A.B., Duke University), Durham, N. C.  
 Tyson, Joseph Blake (A.B., Duke University), Charlotte, N. C.  
 Tyson, Marvin Dewey (A.B., Atlantic Christian College), Rocky Mount, N. C.  
 Tyson, Tommy (A.B., Duke University), Durham, N. C.  
 Waldrop, John Herbert, Jr. (A.B., High Point College), Greenville, N. C.  
 Wallace, Carl Edison (A.B., Elon College), Greensboro, N. C.  
 Walton, Charles Reginald (B.A., Roanoke College), South Boston, Va.  
 Walton, William Carlisle (A.B., Maryville College), Apex, N. C.  
 Warner, Joseph M. G. (A.B., High Point College), Greensboro, N. C.  
 Warren, George B. (A.B., Duke University), Orlando, Fla.  
 Wentz, Walter Allen, Jr. (A.B., Elon College), Rockingham, N. C.  
 Whicker, Grady H. (A.B., High Point College), Jacksonville, N. C.  
 Wicker, Max William (A.B., Duke University), Aberdeen, N. C.  
 Widenhouse, Milton Gordon (A.B., Catawba College), Concord, N. C.  
 Wiggers, Charles Campbell (B.A., Millsaps College), Indianola, Miss.  
 Wiggers, Mary LeGrande (B.A., Millsaps College), Jackson, Miss.  
 Wilkerson, Albert Ernest, Jr. (A.B., Duke University), Durham, N. C.  
 Williams, Clarence Daniel (A.B., Davidson College), Kingstree, S. C.  
 Williams, Jack (B.A., Millsaps College), Lexington, Miss.  
 Wilson, Alvin Austin (A.B., University of North Carolina), Newton, N. C.  
 Wilson, Kelly Johnson (A.B., Duke University), Carthage, Tenn.  
 Wilson, William Earl, Jr. (B.A., Randolph-Macon College), Norfolk, Va.  
 Winegeart, Jack Stroud (A.B., Centenary College), Shreveport, La.  
 Winfree, William A. (B.A., Augustana College), Portsmouth, Va.  
 Wooley, John Rush (A.B., University of North Carolina), Wagram, N. C.  
 Workman, Miles Marion (A.B., High Point College), Thomasville, N. C.  
 Wyand, Fred B., Jr. (A.B., Marshall College), Hinton, W. Va.  
 Young, Joe Bryant (B.S., University of Houston), Houston, Texas.  
 Young, Loren D. (A.B., Duke University), Charleston, W. Va.  
 Young, Russell Lowell, Jr. (A.B., Duke University), North Wilkesboro, N. C.  
 Youngblood, William Lee (B.A., Millsaps College), Wesson, Miss.

*Divinity School students: 203.*

## *Students Enrolled in the Department of Religion of the Graduate School of Arts and Sciences 1950-1951*

Allen, Ray Maxwell (B.A., Southwestern at Memphis; B.D., Duke Divinity School), Durham, N. C.  
 Bailey, Ruby M. (B.A., University of Chattanooga; M.R.E., Duke Divinity School), Durham, N. C.  
 Bellamy, Virginia Nelle (B.S., East Tennessee State College; M.A., Duke University), Powell, Tenn.  
 Carlton, John William (B.A., Baylor University; B.D., Duke Divinity School), Corpus Christi, Texas.  
 Carroll, Kenneth Lane (A.B., Duke University; B.D., Duke Divinity School), Easton, Md.  
 Chamberlain, John Victor (A.B., Florida Southern College), Colwyn, Pa.  
 Daniels, Boyd Lee (A.B., College of Wooster; B.D., McCormick Theological Seminary), Sandusky, Ohio.  
 Gibbs, Norman Brantley (A.B., Southwestern at Memphis; B.D., Louisville Presbyterian Theological Seminary), Memphis, Tenn.



Hamilton, Harold P. (A.B., High Point College; B.D., Duke Divinity School), Lexington, N. C.  
 Hamrick, Emmett Willard (A.B., University of North Carolina), Shelby, N. C.  
 Harris, Carl Vernon (A.B., Wake Forest College; B.D., Yale Divinity School; S.T.M., Yale Divinity School), Morganton, N. C.  
 Helmbold, F. Wilbur (B.A., Howard College), Springville, Ala.  
 Highfill, William Lawrence (A.B., Wake Forest College; B.D., Southern Baptist Theological Seminary), Winston-Salem, N. C.  
 Hosea, Addison (A.B., Atlantic Christian College; B.D., University of the South), Clinton, N. C.  
 Kidder, Maurice Arthur (A.B., University of New Hampshire; S.T.B., Boston University School of Theology; S.T.M., Yale Divinity School), Chapel Hill, N. C.  
 Moore, Jack Warren (A.B., Olivet Nazarene College; B.D., Duke Divinity School), Durham, N. C.  
 Moudy, James M. (B.A., Texas Christian University; B.D., Texas Christian University), College Station, Texas.  
 Pannill, Harry Burnell (A.B., Randolph-Macon College; B.D., Duke Divinity School), Ashland, Va.  
 Perkins, James Crosswell (B.A., Princeton University; B.D., Oberlin School of Theology; Th.M., Oberlin School of Theology), San Antonio, Texas.  
 Reveley, Walter Taylor (A.B., Hampden-Sydney College; B.D., Union Theological Seminary [Richmond]), Durham, N. C.  
 Score, John N. R. (A.B., Southwestern University; B.D., Garrett Biblical Institute), Georgetown, Texas.  
 Smith, Kenneth Lee (A.B., University of Richmond; B.D., Crozer Theological Seminary), Exmore, Va.  
 Suggs, M. Jack (A.B., University of Texas; B.D., Texas Christian University), Gladewater, Texas.  
 Taylor, George Aiken (A.B., Presbyterian College; B.D., Columbia Theological Seminary), Smyrna, Ga.  
 Waggoner, Brooks Milton (A.B., University of Arkansas; B.D., Duke Divinity School), Stilwell, Okla.  
 Wilcox, William George (B.A., Stanford University; M.A., Berkeley Baptist Divinity School; B.D., Union Theological Seminary [New York]), Folsom, Calif.  
 Wiles, Charles Preston (A.B., Washington College; B.D., Virginia Theological Seminary; M.A., Duke University), Brunswick, Md.  
 Workman, George Arthur (A.B., Hobart College; B.D., Virginia Theological Seminary), Durham, N. C.  
*Graduate School students: 28—Total enrollment: 231.*

## *Institutions Represented*

Duke University, 36; High Point College, 21; Wake Forest College, 15; Wofford College, 14; University of North Carolina, 9; Elon College, 8; Randolph-Macon College, 8; Millsaps College, 7; Central College, 5; Davidson College, 5; Southwestern University, 5; Alabama Polytechnic Institute, 4; Atlantic Christian College, 4.  
 The following 3 each: East Tennessee State College, Morris Harvey, Ohio Wesleyan University, University of Houston.

The following 2 each: Asbury College, Centenary College, Dickinson College, Florida Southern College, Hampden-Sydney College, Johns Hopkins University, Kentucky Wesleyan College, Lenoir-Rhyne College, Marshall College, Princeton University, Texas Christian University, University of Rochester, Yale Divinity School.

The following 1 each: Agricultural and Mechanical College of Texas, Albion College, Augustana College, Berea College, Belhany College, Boston University School of Theology, Bridgewater College, Catawba College, The Citadel, Clemson Agricultural College, College of the Ozarks, Columbia University, Cornell University, Crozer Theological Seminary, Fairmont State College, Fukien Christian University, Garrett Biblical Institute, Guilford College, Harvard University, Heidelberg College, Hendrix College, Howard College, Indiana University, Juniata College, Kansas Wesleyan University, King College, McCormick Theological Seminary, Maryville College, Mercer University, Miami University, Middle Tennessee State College, Montreat College, Morningside College, Nebraska Wesleyan University, Newbury College, North Carolina State College, Oberlin College, Olivet Nazarene College, Queens College, Pennsylvania State College, Piedmont College, Presbyterian Theological Seminary, Roanoke College, Shepherd College, Southeast Missouri State College, Southern Baptist Seminary, Syracuse University, Texas Agricultural and Mechanical College, University of Alabama, University of Chattanooga, University of Maryland, University of Minnesota, University of New Hampshire, University of South Carolina, University of the South, University of Richmond, University of Tennessee, University of Texas, University of Tulsa, Ursinus College, Virginia Polytechnic Institute, Washington College, West Virginia Wesleyan College, Western Maryland College, William Jewell College, Woman's College of the University of North Carolina, Union Theological Seminary (Richmond).

*Total number represented: 97.*

## *Geographical Distribution*

North Carolina, 112; Virginia, 14; West Virginia, 14; Texas, 11; South Carolina, 10; Florida, 7; Mississippi, 7; Tennessee, 7; Ohio, 6; Alabama, 5; Maryland, 5; Missouri, 4; New York, 4; Arkansas, 3; Louisiana, 3; Pennsylvania, 3; Georgia, 2; Illinois, 2; Oklahoma, 2.

The following 1 each: California, Delaware, Indiana, Iowa, Kentucky, Michigan, Minnesota, Nebraska, New Jersey, China.

*States: 28—Foreign countries: 1.*







**BULLETIN**  
**OF**  
**DUKE UNIVERSITY**



**Catalogue Number**

**1950-1951**

**ANNOUNCEMENTS FOR 1951-1952**

**VOLUME 23**

**June, 1951**

**NUMBER 8**

# Annual Bulletins

For GENERAL BULLETIN of Duke University, apply to The Secretary, Duke University, Durham, N. C.

For BULLETIN OF UNDERGRADUATE INSTRUCTION, apply to The Director of Admissions, Trinity College, or the College of Engineering, or the Woman's College, Duke University, Durham, N. C.

For BULLETIN OF THE COLLEGE OF ENGINEERING, apply to The Dean of the College of Engineering, Duke University, Durham, N. C.

For BULLETIN OF THE GRADUATE SCHOOL OF ARTS AND SCIENCES, apply to The Dean of the Graduate School, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF LAW, apply to The Dean of the School of Law, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF MEDICINE, apply to The Dean of the School of Medicine, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF NURSING, apply to The Dean of the School of Nursing, Duke University, Durham, N. C.

For BULLETIN OF THE DIVINITY SCHOOL, apply to The Dean of the Divinity School, Duke University, Durham, N. C.

For BULLETIN OF THE SCHOOL OF FORESTRY, apply to The Dean of the School of Forestry, Duke University, Durham, N. C.

For BULLETIN OF THE SUMMER SESSION, apply to The Director of the Summer Session, Duke University, Durham, N. C.

Published by Duke University monthly except in July, August, September, and December. Entered as second-class matter March 25, 1929, at the Post Office of Durham, North Carolina, under the Act of August 24, 1912.

# DUKE UNIVERSITY

GENERAL CATALOGUE



ANNOUNCEMENTS FOR 1951-52



THE CHAPEL



BULLETIN  
OF  
DUKE UNIVERSITY



CATALOGUE NUMBER

1950-1951

ANNOUNCEMENTS FOR 1951-1952

DURHAM, NORTH CAROLINA

1951

"I request . . . that great care and discrimination be exercised in admitting as students only those whose previous record shows a character, determination, and application evincing a wholesome and real ambition for life."

—JAMES B. DUKE.

# Contents

	PAGE
CALENDAR OF THE COLLEGES.....	7
HISTORY .....	8
GOVERNMENT .....	13
OFFICERS OF THE UNIVERSITY.....	21
THE UNDERGRADUATE COLLEGES.....	62
UNIVERSITY LECTURES.....	155
ALUMNI ORGANIZATIONS.....	156
GIFTS AND BEQUESTS.....	158
THE GRADUATE SCHOOL OF ARTS AND SCIENCES.....	161
THE DIVINITY SCHOOL.....	201
THE SCHOOL OF LAW.....	223
THE SCHOOL OF MEDICINE.....	241
THE SCHOOL OF NURSING.....	271
THE SCHOOL OF FORESTRY.....	293
THE SUMMER SESSION.....	311
DEGREES AND HONORS.....	344
ROLL OF STUDENTS.....	356
INDEX .....	431

# 1951

## JULY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

## AUGUST

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

## SEPTEMBER

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

## OCTOBER

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31					

## NOVEMBER

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18
19	20	21
22	23	24
25	26	27
28	29	30

## DECEMBER

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	

# 1952

## JANUARY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

## FEBRUARY

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	

## MARCH

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

## APRIL

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30

## MAY

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18
19	20	21
22	23	24
25	26	27
28	29	30
31		

## JUNE

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

## JULY

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30
31				

## AUGUST

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18
19	20	21
22	23	24
25	26	27
28	29	30
31		

## SEPTEMBER

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30

## OCTOBER

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	

## NOVEMBER

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30		

## DECEMBER

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31					

# Calendar of the Colleges

1951

- September 13. Thursday, 9:00 A.M. Dormitories open to freshmen.  
September 13. Thursday, 7:30 P.M. Assembly for all entering freshmen; Freshman Orientation Program begins.  
September 17. Monday. Registration and matriculation of new students with advanced standing, Trinity College and the College of Engineering.  
September 18. Tuesday. Registration and matriculation of new students with advanced standing, Woman's College.  
September 20. Thursday. Instruction begins, fall semester.  
October 30. Tuesday. Junior Examination in English Usage.  
November 10. Saturday. Last day for reporting mid-semester grades.  
November 22. Thursday. Thanksgiving Day: a holiday.  
December 11. Tuesday. Founders' Day.  
December 20. Thursday, 5:00 P.M. Christmas recess begins.

1952

- January 3. Thursday, 8:00 A.M. Instruction is resumed.  
January 16. Wednesday. Mid-year examinations begin.  
January 26. Saturday. Mid-year examinations end.  
January 28. Monday. Registration and matriculation of new students.  
January 29. Tuesday. Last day for matriculation for the spring semester.  
January 30. Wednesday. Instruction begins, spring semester.  
March 13. Thursday. Last day for reporting mid-semester grades.  
March 22. Saturday, 12:30 P.M. Spring recess begins.  
March 31. Monday, 8:00 A.M. Instruction is resumed.  
May 19. Monday. Final examinations begin.  
May 29. Thursday. Final examinations end.  
May 31. Saturday. Commencement begins.  
June 1. Sunday. Commencement Sermon.  
June 2. Monday. Graduating Exercises.

The above is the basic University Calendar, applying more particularly to the Undergraduate Colleges. Variations as affecting the various Schools are included in the catalogue bulletins of such Schools.



# History



Duke University owes its existence to a charitable trust set up by James B. Duke by an Indenture dated December 11, 1924, and known as the Duke Endowment; to gifts made by him to the University in the succeeding year; and to bequests that came through his will at his death, October 10, 1925. It is built around Trinity College which was brought to Durham and maintained there largely through the generosity of the Duke family.

Trinity College in its origin goes back to 1838. In that year the citizens of a rural community in the northwest section of Randolph County, North Carolina, established a school with Rev. Brantley York as principal. In 1839 this school was enlarged and named Union Institute. In 1841 it was incorporated by the following enactment of the Legislature of North Carolina:

*An Act to Incorporate Union Institute Academy.\**

Be it enacted by the General Assembly of the State of North Carolina, and it is hereby enacted by the authority of the same, That Nathan Hunt, Joseph Mendenhall, Joseph Johnson, Lewis Leach, Jabez Leach, Martin W. Leach, and Ahi Robbins, and their successors, are hereby constituted a body corporate and politic to be known and distinguished by the name and style of the Trustees of Union Institute Academy, and by that name shall have succession, and shall be able and capable in law to have, receive and possess lands and tenements, goods and chattels, acquired by gift or otherwise, and use and apply the same according to the will of the donor, or dispose of the same when not forbidden by the terms of the gift. They may sue and be sued, plead and be impleaded in any Court of Justice, and shall have power to fill vacancies in their body, which may occur by death, resignation, or otherwise, establish such laws and regulations for the government of said Institution as they may deem necessary, not inconsistent with the laws of this State, and do and perform all such acts and things as are incident to, and usually exercised for, bodies politic, for the accomplishments of the object contemplated.

Ratified the 12th day of January, 1841.

In the year 1842 Braxton Craven became principal of the school. The growth and development of the school caused the Trustees to plan to put it in direct relation to the educational needs of the public schools of the State. Application was made to the Legislature of North Carolina for a new charter, and on January 28, 1851, Union Institute Academy was incorporated as Normal College by the following enactment:

*An Act to Incorporate Union Institute, in Randolph County, a Normal College.†*

SECTION 1. Be it enacted by the General Assembly of the State of North Carolina, and it is hereby enacted by the authority of the same, That the present Trustees of Union Institute, to-wit: M. W. Leach, Ahi Robbins, Joseph Johnson, James Leach, and C. M. Hines; together with Rev. B. Craven, of said Institute; Hon. A. H. Sheppard, of Salem; John A. Gilmer, Esq., of Greensboro; Col. Samuel Hargrave, of Lexington; J. L. Blackmer, Esq., of Salisbury; Rev. S. A. Andrews, of Greensboro; Dr. S. G. Coffin, of Jamestown; H. B. Elliott, Esq., of Randolph; J. W. Thomas, Esq., of Davidson; John B. Troy, of Randolph; J. P. H. Russ, of Randolph; Eli Russell, of Montgomery, and Gen. J. M. Leach, of Lexington; and their successors be, and they are hereby declared, a body politic and corporate, to be known and distinguished by the name and style of the Normal College, and by that name shall have a perpetual succession, and a common seal, and be able and capable in law, of holding lands, tenements and chattels, sufficient for the uses and purposes of said College, and of suing and being sued, and of pleading and being impleaded.

SEC. 2. Be it further enacted, That said Trustees shall have the power to fix the time of holding the annual and other meetings, and to prescribe the manner in which vacancies in their body may be filled, five Trustees being a quorum to do business.

SEC. 3. Be it further enacted, That the said College shall be under the supervision, management and government of a President and such other persons as said Trustees may

\* Laws of North Carolina, 1840-1843.

† Laws of 1850-1851, chapter 20, page 56.

appoint; the said President, with the advice of the other persons so appointed, shall from time to time make all needful rules and regulations for the internal government of said College, and fix the number and compensation of teachers to be employed therein, to prescribe the preliminary examinations and the terms and conditions on which pupils shall be received and instructed, and the number of pupils to be received from the respective counties.

SEC. 4. Be it further enacted, That said Trustees shall have power to make such rules, regulations and bylaws, not inconsistent with the Constitution of the United States and of this State as may be necessary for the good government of said College, and the management of the property and funds of the same.

SEC. 5. Be it further enacted, That when any pupil shall have sustained a satisfactory examination on the studies, or course of studies, prescribed by the Faculty and Trustees of said College, such persons shall be deemed qualified to teach common schools and may receive a certificate signed by the President and at least seven Trustees, which certificate shall be sufficient evidence of ability to teach in any of the common schools in this State, without any reëxamination of the county committees; and where county certificates are now required before paying out the public funds, the certificate of the Normal College shall answer in lieu thereof.

SEC. 6. Be it further enacted, That the whole College course shall be divided into four classes or degrees, styled first, second, third and fourth, and students shall be ranked accordingly.

SEC. 7. Be it further enacted, That all pupils entering said College shall first sign a declaration, in a book to be kept by the President for that purpose as follows: "We, the subscribers, hereby declare that it is our intention to devote ourselves to the business of teaching common schools in the State of North Carolina, and that our sole object in reëtorting to this Normal College is the better to prepare ourselves for that important duty," which declaration it shall be the duty of the President to explain to the pupils before they sign the same.

Ratified 28th January, 1851.

On November 21, 1852, the Legislature ratified amendments to the charter of 1851 including changes and additions as follows:

*An Act to Amend an Act, Entitled "An Act to Incorporate Union Institute, in Randolph County, Normal College":\**

SECTION 1. Be it enacted by the General Assembly of the State of North Carolina, and it is hereby enacted by the authority of the same, That J. C. Dobbin, John A. Gilmer, W. H. Washington, A. H. Sheppard, H. B. Elliott, J. M. Leach, Joseph Johnson, S. G. Coffin, A. S. Andrews, Joseph B. Cherry, N. W. Woodfin, B. Craven, James Leach, Calvin Graves, Ahi Robbins, John B. Troy, Robert Strange, John W. Thomas, Samuel Hargrave, J. P. H. Russ, W. M. Leach, W. L. Steele, R. M. Saunders, W. B. Lane, G. W. Caldwell, C. H. Wiley, Jabez Leach, John A. Lillington, J. T. Morehead, Thales McDonald, R. O. Puryear, S. P. Hill, Alexander Gray, James M. Garrett, and Edward Ogburn and their successors be, and they are hereby declared a body politic and corporate to be known and distinguished by the name and style of "The Trustees of Normal College," and by that name and style shall have a perpetual succession and a common seal, and be able and capable in law of holding lands, tenements and chattels for the uses and purposes of said College; and of suing and being sued, and of pleading and being impleaded.

SEC. 2. Be it further enacted, That the Governor of the State shall be *ex-officio* President of the Board of Trustees, and that the common school superintendent, should such an officer exist, shall be *ex-officio* Secretary of the Board, and that all vacancies in the Board shall be filled by a majority of the Trustees of said College.

SEC. 3. Be it further enacted, That the Trustees shall have power of appointing an Executive Committee, to consist of seven members which committee shall control the internal regulations of said College, and fix all salaries and emoluments, and of doing all other things necessary for an institution of learning not inconsistent with the laws of this State and of the United States.

SEC. 4. . . . They shall have also the power to grant such degrees and marks of honor as are given by Colleges and Universities generally.

SEC. 5. Be it further enacted, That the Secretary of the Board of Trustees shall, within ten days after the meeting of each [Legislature] make a full report of the condition and operations of said Normal College, and the general character of Normal Instruction; also, the condition and progress of Normal schools generally, together with all other information deemed important in the education of teachers, giving also the names and residences of all who have been authorized to teach.

SEC. 6. Be it further enacted, That the President and Directors of the literary fund are hereby directed to loan to the Trustees of Normal College, the sum of ten thousand dollars out of any moneys not otherwise appropriated, at six per cent interest, to be paid semiannually, upon said Trustees giving bond and good security for the same.

Under the amended charter authorizing the institution to confer degrees, two students were graduated on July 28, 1853, with the degree of Bachelor of Arts.

In the year 1853-1854 a larger building was erected by means of money lent by the State of North Carolina under the authority granted in the amended char-

\* Laws of 1852-1853, chapter 88, page 161.

ter. In November, 1856, the Trustees of Normal College authorized President Craven to propose to the North Carolina Conference of the Methodist Episcopal Church, South, that the institution be placed under the ownership and control of that body. The Conference passed the following resolution:

1. That the Conference authorize and request the Board of Trustees of Normal College to raise by donations twenty thousand dollars.
2. That all lands and property belonging to the College be conveyed to the Board of Trustees in trust for the North Carolina Conference.
3. That the Conference fill all vacancies in the Board.
4. That the Conference appoint a visiting committee, which committee shall have equal power with the Board as to the internal regulations and operations of the College.

Within the following two years the Trustees arranged to meet all the conditions stipulated. The North Carolina Conference of the Methodist Episcopal Church, South, in consequence, became invested with the complete ownership and control of the College.

On February 16, 1859, the charter was amended and the name of the institution changed to Trinity College by the following enactment of the Legislature of North Carolina:

*An Act to Amend the Charter of Normal College:\**

SECTION 1. Be it enacted by the General Assembly of the State of North Carolina, and it is hereby enacted by the authority of the same, That the corporation established by an act passed in 1852, and known by the style and title of the "Trustees of Normal College," be and the same is hereby changed to Trinity College; and said corporation shall henceforth, by the name and style of Trinity College, hold and use all the authority, privileges, possessions and liabilities it had under the former title and name.

SEC. 2. Be it further enacted, That the estate, real and personal, received and controlled by the Trustees of Trinity College, shall be for the uses and purposes of a literary institution for the North Carolina Conference of the Methodist Episcopal Church, South.

SEC. 3. Be it further enacted, That all vacancies in the Board of Trustees shall be filled by said North Carolina Conference: *Provided, however*, that no person shall be elected a Trustee till he has first been recommended by a majority of the Trustees present at a regular meeting; and the Trustees shall have power to remove any member of their body who may remove beyond the boundaries of the State, or who may refuse or neglect to discharge the duties of a Trustee.

SEC. 4. Be it further enacted, That the Faculty and Trustees shall have the power of conferring such degrees and marks of honor as are conferred by colleges and universities generally; and that five Trustees shall be a quorum to transact business.

SEC. 5. Be it further enacted, That no person shall keep, maintain, or have at Trinity College or within two miles thereof, any tipping-house establishment, or place for the sale of wine, cordials, spirituous or malt liquors; nor shall any person in the State, without a written permission from the Faculty, sell, or offer to sell, give or deliver to any student of Trinity College, or to any other person, any wine, cordials, spirituous or malt liquors for the purpose of being used or with a knowledge that the same will be used at said College, or within two miles thereof, by any student.

SEC. 6. Be it further enacted, That no person shall set up, keep or maintain at Trinity College, (or) within two miles thereof, any public billiard table, or other table, of any kind at which games of chance or skill, by whatever name called, may be played; and that no person, without written permission from the Faculty, shall within the same limits exhibit any theatrical, sleight-of-hand, natural or artificial curiosities, or any concert, serenade, or performance in music, singing or dancing.

SEC. 7. Be it further enacted, That sections second, fourth and fifth of the charter passed in 1852, are hereby repealed, and that all acts and laws coming within the meaning and purview of this present act are hereby repealed.

During the Civil War the College shared the common fate of Southern colleges. President Craven resigned in 1863, and Professor William T. Gannaway was elected his successor. In October, 1865, Dr. Craven was re-elected to the presidency; however, the work of the College, which had been suspended in April of that year, was not resumed till January, 1866. Dr. Craven remained president of the College till his death, November 7, 1881. Professor William Howell Pegram was then elected chairman of the Faculty. He served till the close of the academic year, June, 1883.

The Reverend Marquis L. Wood was elected president in 1883; he resigned in December, 1884, when Professor John F. Heitman was elected chairman of the Faculty. John Franklin Crowell was chosen president of the College in April, 1887.

President Crowell conceived the idea of enlarging the scope of college work

\* Laws of 1858-1859, chapter 85, page 81.



and of removing Trinity College to a city. The Board of Trustees on May 7, 1889, passed the following resolutions:

*Resolved* (1). That after mature and prayerful consideration we believe it best for the interest of Methodism in North Carolina, and the cause of God, to move Trinity College to some prominent center within this State: *Provided*, There shall be tendered to this Board a proper guarantee of a suitable site, with buildings on it, of at least equal value, and as well suited for the uses of the College as those on the present site.

*Resolved* (2). That a committee of five be appointed to carry out the true intent of the above resolution, and report to the next annual meeting of the Board of Trustees.

At a meeting of the Trustees held in Greensboro, North Carolina, November 30, 1889, the following resolutions were adopted:

*Resolved* (1). That the Board of Trustees of Trinity College accept the offer of the citizens of Raleigh to erect a college building on the site designated, said building to be according to the plans and specifications mentioned in their offer.

*Resolved* (2). That we recommend the N. C. Annual Conference of the M. E. Church, South, to authorize the removal of Trinity College in accordance with the above and former resolutions passed by this Board.

*Resolved* (3). That the grounds and buildings now owned and used at Trinity College be held by the same Board of Trustees to be used as an academical department to prepare students for the college classes.

In accordance with these resolutions, through President Crowell, the Conference was asked at its session in Greensboro, December, 1889, to grant permission to remove the College to the City of Raleigh. The Conference took the following action:

*Resolved*, That the Board of Trustees of Trinity College be and is hereby authorized and directed to move Trinity College to the City of Raleigh, when the citizens of said city shall have erected on the site designated and known as the Boylan lot, the building proposed and agreed to be built by them *Provided*, That before said college is moved, as aforesaid, there shall be made, executed and delivered to said Trustees a good and sufficient deed in fee simple with proper covenants of warranty and seizin, conveying the lot and site designated to said Trustees and their successors in office, for the use and benefit of the North Carolina Conference, Methodist Episcopal Church, South, as it now exists, and for the use and benefit of such Conferences, as may be hereafter created by the Methodist Episcopal Church, South, out of any territory within the State of North Carolina.

Some time after this action of the Conference, Washington Duke and other citizens of Durham, North Carolina, made a proposition to the Trustees to locate the College in Durham, and this proposition was accepted. On January 21, 1891, the Legislature of North Carolina issued the following charter:

*An Act to Amend the Charter of Trinity College:*

The General Assembly of North Carolina do enact:

SECTION 1. That the Trustees of Trinity College are authorized and empowered to remove the operations and exercises of said College, and to locate the buildings deemed necessary by them for the purpose of the College, at or near the town of Durham, North Carolina. They may, if they so elect, establish and maintain in connection with said College institutions of primary and intermediate education at the present site of the College in Randolph County, and at such other points as they may now or hereafter determine, for the purpose of preparing students for admission to a collegiate course. The management of such auxiliary and subordinate high schools and academies shall be vested in the said Board of Trustees, who are authorized to make by-laws and regulations for them, as well as for the College proper.

SEC. 2. That the Trustees of Trinity College are authorized to receive and hold by gift, devise or purchase, property, real and personal, to be held for the use of said College and its dependent schools or for the use of either or both (as may be designated in the conveyance or will), (to a value not exceeding in the aggregate sum three millions of dollars).

SEC. 3. That the Trustees shall be thirty-six in number, of whom twelve shall be elected by the North Carolina Conference of M. E. Church, South, twelve by the W. N. C. Conference of said church, and twelve by graduates of said College. The term of office of Trustees shall be six years, and they shall be so arranged that four Trustees shall be elected by each Conference and four by the graduates every two years. The Trustees shall regulate by by-laws the manner of election of the Trustees to be chosen by the graduates. Should there exist a vacancy by death, resignation, or otherwise, of any Trustee, the same shall be filled for the unexpired term by the Board of Trustees. The terms of the Trustees now in office shall expire January first, one thousand eight hundred and ninety-two. At the first election held under this amendment to the Charter, the body of graduates and each of the Conferences shall respectively elect four Trustees for the term of two years; in like manner each of said constituencies shall elect four Trustees for the term of four years, and in like manner each shall elect four Trustees for the term of six years.

In September, 1892, the College opened its first session in the new plant located at Durham. In May, 1894, President Crowell resigned, and on August 1, 1894, the Reverend John C. Kilgo was elected his successor. In May, 1897, the Trustees authorized the admission of women as students to all departments of the College.

On account of the fact that the fundamental laws under which the College was managed were contained in an original charter and in several amendments, it was deemed best by the Board of Trustees, in June, 1902, to appoint a committee to make an application to the Legislature for a new charter, which should unify and harmonize the provisions of the existing legislation. On February 28, 1903, the Legislature of North Carolina granted the new charter which is identical with the charter as found on pages 13-14, except that the corporate name of the institution is changed to Duke University and the corporation is given perpetual existence, an amendment enacted by the General Assembly of North Carolina, January 19, 1911, having already stricken out the limitations set in former charters to the amount of property the College might hold.

Having been elected a bishop of the Methodist Episcopal Church, South, President Kilgo resigned in June, 1910. William Preston Few was elected to succeed him and was formally inaugurated November 9, 1910.

On December 29, 1924, the Board of Trustees of Trinity College met to consider the Indenture of Trust executed by James B. Duke, December 11, 1924. The Board voted unanimously to accept the provisions of the Indenture insofar as it affected Duke University, and authorized the necessary steps to be taken whereby, on December 30, 1924, a charter for the University was granted. The charter follows closely that of Trinity College and is printed on pages 14-15.

President Few died October 16, 1940. Dr. R. L. Flowers was elected President January 29, 1941.

On November 19, 1948, Arthur Hollis Edens was named President to succeed Dr. Flowers, who was made Chancellor on the same day.

Duke University is approved by the recognized accrediting agencies in the field of university education and is a member of various associations devoted to the interests of such education. Among those in which it holds membership are the Association of American Universities, the Southern Association of Colleges and Secondary Schools, the American Association of Colleges, the Southern University Conference, the American Association of Law Schools, the Association of American Medical Colleges, the American Association of Theological Schools, and others.



# Government



## 1. THE INDENTURE OF TRUST BY WHICH THE UNIVERSITY WAS CREATED

Among the provisions of James B. Duke's Indenture of Trust was an educational institution to be known as Duke University, in respect to which the Indenture contains the following provisions, and these provisions apply also to gifts made by him the year before he died and to bequests that came to the University at his death or that have come since:

I. (In Article FOURTH) The Trustees hereunder are hereby authorized and directed to expend as soon as reasonably may be not exceeding Six Million Dollars of the corpus of this trust in establishing at a location to be selected by them within the State of North Carolina an institution of learning to be known as Duke University, for such purpose to acquire such lands and erect and equip thereon such buildings according to such plans as the Trustees may in their judgment deem necessary and adopt and approve for the purpose, to cause to be formed under the laws of such state as the Trustees may select for the purpose a corporation adequately empowered to own and operate such properties under the name of Duke University as an institution of learning according to the true intent hereof, and to convey to such corporation when formed the said lands, buildings and equipment upon such terms and conditions as that such corporation may use the same only for such purposes of such university and upon the same ceasing to be so used then the same shall forthwith revert and belong to the Trustees of this trust as and become a part of the corpus of this trust for all the purposes thereof.

However, should the name of Trinity College, located at Durham, North Carolina, a body politic and incorporate, within three months from the date hereof (or such further time as the Trustees hereof may allow) be changed to Duke University, then, in lieu of the foregoing provisions of this division "FOURTH" of this Indenture, as a memorial to his father, Washington Duke, who spent his life in Durham and whose gifts, together with those of Benjamin N. Duke, the brother of the party of the first part, and of other members of the Duke family, have so largely contributed toward making possible the corpus of this trust as soon as reasonably may be a sum not exceeding Six Million Dollars in expanding and extending said University, acquiring and improving such lands, and erecting, removing, remodeling and equipping such buildings, according to such plans, as the Trustees may adopt and approve for such purpose to the end that said Duke University may eventually include Trinity College as its undergraduate department for men, a School of Religious Training, a School for Training Teachers, a School of Chemistry, a Law School, Co-ordinate College for Women, a School of Business Administration, a Graduate School of Arts and Sciences, a Medical School and an Engineering School, as and when funds are available.

II. (In Article FIFTH) Thirty-two per cent of said net amount not retained as aforesaid for addition to the corpus of this trust shall be paid to that Duke University for which expenditures of the corpus of the trust shall have been made by the Trustees under the "Fourth" division of this Indenture so long as its name shall be Duke University and it shall not be operated for private gain, to be utilized by its Board of Trustees in defraying its administration and operating

expenses, increasing and improving its facilities and equipment, the erection and enlargement of buildings and the acquisition of additional acreage for it, adding to its endowment or in such other manner for it as the Board of Trustees of said institution may from time to time deem to be of its best interests, provided that in case such institution shall incur any expense or liability beyond provisions already in sight to meet same, or in the judgment of the Trustees under this Indenture be not operated in a manner calculated to achieve the results intended hereby the Trustees under this Indenture may withhold the whole or any part of such percentage from said institution so long as such character of expense or liabilities or operation shall continue, such amounts so withheld to be in whole or in part either accumulated and applied to the purposes of such University in any future year or years, or utilized for the other objects of this Indenture, or added to the corpus of this trust for the purpose of increasing the principal of the trust estate, as the Trustees may determine.

III. (In Article SEVENTH) I have selected Duke University as one of the principal objects of this trust because I recognize that education, when conducted along sane and practical, as opposed to dogmatic and theoretical, lines, is, next to religion, the greatest civilizing influence. I request that this institution secure for its officers, trustees, and faculty, men of such outstanding character, ability, and vision as will insure its attaining and maintaining a place of real leadership in the educational world, and that great care and discrimination be exercised in admitting as students only those whose previous record shows a character, determination, and application evincing a wholesome and real ambition for life. And I advise that the courses at this institution be arranged, first, with special reference to the training of preachers, teachers, lawyers and physicians, because these are most in the public eye, and by precept and example can do most to uplift mankind, and second, to instruction in chemistry, economics, and history, especially the lives of the great of earth, because I believe that such subjects will most help to develop our resources, increase our wisdom and promote human happiness.

IV. (In Article THIRD) As respects any year or years and any purpose or purposes for which this trust is created (except the payments hereinafter directed to be made to Duke University) the Trustees in their uncontrolled discretion may withhold the whole or any part of said incomes, revenues and profits which would otherwise be distributed under the "Fifth" division hereof, and either (1) accumulate the whole or any part of the amount so withheld for expenditures (which the Trustees are hereby authorized to make thereof) for the same purpose in any future year or years, or (2) add the whole or any part of the amounts so withheld to the corpus of the trust, or (3) pay, apply and distribute the whole or any part of said amounts to and for the benefit of any one or more of the other purposes of this trust, or (4) pay, apply and distribute the whole or any part of said amounts to or for the benefit of any such like charitable, religious or educational purpose within the State of North Carolina or the State of South Carolina, or any such like charitable hospital purpose which shall be selected therefor by Trustees called for the purpose, complete authority and discretion in and for such selection and utilization being hereby given the Trustees in the premises.

## 2. THE CHARTER OF THE UNIVERSITY

SECTION I. That A. P. Tyer, J. H. Southgate, B. N. Duke, G. A. Oglesby, V. Ballard, J. A. Long, J. F. Bruton, J. N. Cole, F. A. Bishop, J. G. Brown, C. W. Toms, J. W. Alspaugh, W. R. Odell, J. A. Gray, F. Stikeleather, Kope Elias, S. B. Turrentine, P. H. Hanes, T. F. Marr, G. W. Flowers, M. A. Smith, R. H. Parker, W. J. Montgomery, F. M. Simmons, O. W. Carr, R. A. Mayer, N. M. Journey, Dred Peacock, B. B. Nicholson, W. G. Bradshaw, E. T. White, T. N. Ivey, J. B. Hurley, R. L. Durham, W. C. Wilson, and their associates and successors shall be, and continue as they have been, a body politic and corporate under the name and style of DUKE UNIVERSITY, and under such name and style shall have perpetual existence and are hereby invested with all the property and rights of property which now belong to the said corporation, and said corporation shall henceforth and perpetually, by the name and style of DUKE UNIVERSITY, hold and use all the authority, privileges, and possessions it had or exercised under any former title and name, and be subject to all recognized legal liabilities and obligations now outstanding against said corporations.

SEC. 2. That such corporation is authorized to receive and hold by gift, devise, purchase or otherwise, property, real and personal, to be held for the use of said University and its dependent schools or for the use of either or both (as may be designated in the conveyance or will).

SEC. 3. That the Trustees shall be thirty-six in number, of whom twelve shall be elected by the North Carolina Conference of the M. E. Church, South; twelve by the W. N. C. Conference of the said church; and twelve by the graduates of said University; *Provided, however*, That no person shall be elected a Trustee till he has first been recommended by a majority of the Trustees present at a regular meeting; and the Trustees shall have power to remove any member of their body who may remove beyond the boundary of the State or who may refuse or neglect to discharge the duties of a Trustee. The term of office of Trustees shall be six years, and they shall be so arranged that four Trustees shall be elected by each Conference and four by the graduates every two years. The Trustees shall regulate by bylaws the manner of election of the Trustees to be chosen by the graduates. Should there exist a vacancy by death, resignation, or otherwise of any Trustee, the same shall be filled for the unexpired term by the Board of Trustees. That the present Trustees shall continue and remain in office during the term for which they have been heretofore respectively elected.

SEC. 4. That the said corporation shall be under the supervision, management and government of a president and such other persons as said Trustees may appoint; the said president, with the advice of other persons so appointed, shall from time to time make all needful rules and regulations for the internal government of said University and prescribe the preliminary examinations and terms and conditions on which pupils shall be received and instructed.

SEC. 5. That said Trustees shall have power to make such rules, regulations, bylaws not inconsistent with the Constitution of the United States and of this State, as may be necessary for the good government of said University and management of the property and funds of the same.

SEC. 6. That the Trustees shall have power to fix the time of holding their annual and other meetings, to elect a president and professors for said University, to appoint an executive committee to consist of seven members, which committee shall control the internal regulations of said University and fix all salaries and emoluments, and to do all other things necessary for an institution of learning not inconsistent with the laws of this State and of the United States.

SEC. 7. That the Faculty and Trustees shall have the power of conferring such degrees and marks of honor as are conferred by colleges and universities generally; and that five Trustees shall be a quorum to transact business.

SEC. 8. That all laws and parts of laws or of the charter heretofore granted which are in conflict with this act are hereby repealed.

SEC. 9. That this act shall be in force from and after its ratification and acceptance by the Board of Trustees.

### 3. THE BYLAWS OF THE UNIVERSITY

1. AIMS OF THE UNIVERSITY. The aims of Duke University are to assert a faith in the eternal union of knowledge and religion set forth in the teachings and character of Jesus Christ, the son of God; to advance learning in all lines of truth; to defend scholarship against all false notions and ideals; to develop a Christian love of freedom and truth; to promote a sincere spirit of tolerance; to discourage all partisan and sectarian strife; and to render the largest permanent service to the individual, the state, the nation, and the church. Unto these ends shall the affairs of this University always be administered.

2. THE UNIVERSITY TRUSTEES, THEIR MEETINGS AND THEIR OFFICERS. The Alumni Trustees, nominated by the Board as provided for in the Charter, are elected by the Alumni Association. The officers of the Board are chairman, vice-chairman, and recording secretary. They are elected by the Trustees at their annual meeting to serve one year or until their successors are elected and qualify. The chairman calls to order and presides at all meetings of the Board, calls extraordinary meetings when, in his judgment, such meetings may be necessary, and represents

the Trustees at public meetings of the University. He is ex-officio member of the Executive Committee. In the absence of the chairman, the vice-chairman calls to order and presides over meetings of the Board, but does not perform any of the other duties of the chairman unless ordered to do so by the Board or the Executive Committee. The recording secretary records the minutes of all the meetings, does the correspondence, and is the custodian of the records and other documents that may belong to the Board.

3. **THE EXECUTIVE COMMITTEE.** The Executive Committee consists of seven members, three of them from the University Trustees, including the chairman of the Board ex-officio, three from the Endowment Trustees, and the President of the University ex-officio. It performs the duties set out for it in the charter—namely, controls the internal regulations of the University and fixes all salaries and emoluments. It has all the powers of the Board of Trustees in the interims between meetings of the Board of Trustees except the nomination of Trustees and election of members of the Executive Committee; however, appointment of officers of the University by the Executive Committee is subject to the approval of the University Trustees. The Executive Committee is expressly empowered to appoint an Investment Committee and to give to such Committee such powers and duties, as in the judgment of the Executive Committee, may seem fit. The Executive Committee is elected by the University Trustees, three of them on nomination of the Endowment Trustees, and the Committee elects its own officers who are chairman and recording secretary. It meets once a month (unless otherwise determined by the Committee) and oftener when necessary and by its own resolution sets its time and date of meetings except that special meetings are called by its chairman upon three or more days written or telegraphic notice to the members of the Committee. The Committee, through its chairman, once a year makes a report to the annual meeting of the University Trustees.

4. **OFFICERS OF THE UNIVERSITY.** The officers of the University are a president, three vice-presidents, a business manager and comptroller, a treasurer, a burser, a dean of the University, and such other deans as may be needed, a recording dean or registrar, and a secretary who is also secretary of the faculty. There may also be a chancellor and a vice-chancellor. Whenever it may seem wise, one person may hold more than one office.

**PRESIDENT.** The President of the University calls, and presides at, all the meetings of the Faculties, sees that the laws and regulations of the Executive Committee and the Trustees affecting the administration and work of the University are carried out, appoints all committees of the Faculties and has direction of the discipline and work of the University. He has the authority to veto any action of the Faculties, when, in his judgment, such action is not in harmony with the aims and laws of the University, or when he may deem such action as unwise. However, in every instance he shall submit to the Faculty in writing his reasons for setting aside their action, and the secretary of the Faculty shall record his reasons in the record book of the Faculty. The President makes an annual report to the Board of the work, conditions, and needs of the University, and of other matters that may be of concern to it or to the cause of higher education. He nominates all members of the Faculties, and represents them at all public meetings of the University. He is an ex-officio member of the Executive Committee; and acts, unless the Trustees designate the Chancellor of the University for the purpose, as a medium of communication between the University Trustees and the Endowment Trustees.

**CHANCELLOR.** There may be a Chancellor of the University. If the Trustees appoint such an officer, he shall be selected for this office because of his long and faithful service to the University. Such an officer, if appointed, is a high officer of the University. He may be designated by the Trustees as the medium of communication between the University Trustees and the Endowment Trustees and when he is so designated the President does not act in such a capacity. He is available, when requested by the President, to render all possible services in an advisory capacity. He has such other duties as may, from time to time, be delegated to him by the Trustees.

**VICE-CHANCELLOR.** There may be a Vice-Chancellor of the University. If the



Trustees appoint such an officer he shall be selected because of his long and faithful service to the University. When requested by the Chancellor, he performs the duties designated to the Chancellor by the Trustees. He is available, when requested by the Chancellor or President, to render all possible services in an advisory capacity. He also has such other duties as, from time to time, may be delegated to him by the Trustees.

**VICE-PRESIDENTS.** The three Vice-Presidents of the University have supervision of the work of the University in the divisions of (a) education, (b) public relations, and (c) student life. In the absence of the President, Vice-Presidents, in the above order, may perform such duties of the President as may demand immediate attention.

**BUSINESS MANAGER AND COMPTROLLER.** The Business Manager, who is also Comptroller, has the custody of all property of the University. He is responsible to an administrative committee and through such committee to the Trustees either directly or through the Executive Committee for all matters pertaining to the business affairs of the University except the investment of funds and is required to make monthly reports through such administrative committee to the Executive Committee and annual reports through the administrative committee to the Trustees concerning his accounts and the property in his charge. Such administrative committee is composed of not less than three nor more than five persons, three of whom are the President of the University, as chairman, the Business Manager and Comptroller, and a Vice-President selected from time to time by the Trustees or the Executive Committee. The Executive Committee has power to determine the number, if any, of additional members, up to the limit set, to be added to or removed from membership in the committee and in their judgment to make selection of the persons to be so added or so removed. The Business Manager and Comptroller annually prepares or causes to be prepared a Budget of expected Receipts and Disbursements and submits same to the Executive Committee for their approval. Upon such approval, he is primarily responsible for the operation of the Budget. He nominates to the Executive Committee any and all assistants required by him to do well the duties of his office. The Business Manager and Comptroller shall be required to give bond in such amount as may be designated by the Trustees or the Executive Committee for the faithful performance of his duties.

**TREASURER.** The Treasurer has primary responsibility for the care and custody of all securities and for the financial records of the University. He makes an annual report of his accounts to the Trustees and such reports, as from time to time, may be required of him by the Executive Committee. He also makes to the Business Manager and Comptroller monthly reports and oftener when required. He nominates to the Executive Committee any and all assistants required by him to do well the duties of his office including the nomination of a Bursar and Assistant Treasurer or Treasurers which officers and assistants shall primarily be responsible to him. The Treasurer and his assistants shall be required to give bond in such amount as may be designated by the Trustees or the Executive Committee for the faithful performance of their duties.

**BURSAR.** The Bursar has primary responsibility for all collections and disbursements. He is nominated by and responsible to the Treasurer to whom he makes such reports as the Treasurer from time to time requires of him. The Bursar shall be required to give bond in such amount as may be designated by the Trustees or the Executive Committee for the faithful performance of his duties.

**SECRETARY.** The Secretary of the University has custody of the corporate seal of the University and affixes and attests same when circumstances require and the Trustees or the Executive Committee so direct. He is also secretary of the Faculty, attends its meetings and makes permanent records of actions and transactions at such meetings. He has such other duties and responsibilities as his title suggests and as may, from time to time, be delegated to him by the appropriate authorities.

5. **FACULTIES.** The General Faculty of the University is composed of professors, associate professors, and assistant professors who have been elected to membership in the Faculty. Concerning questions that do not lie exclusively in



the field of any one Faculty and questions of University educational policy this Faculty has the right to enact such regulations as it may deem necessary to carry on the instruction, advance the standard of work, and otherwise develop the scholarly aims of the University. The General Faculty recommends to the University Trustees such persons as it deems fit to receive academic degrees or other marks of academic distinction. This Faculty meets twice a year and at other times on the call of the President or Dean of the University, or on the written request of five members.

The professional schools have their own faculties, each with its dean and other appropriate officers elected by the Executive Committee with the approval of the University Trustees, and each is authorized to perform any educational functions that lie in its field.

The Faculty Council includes the Deans and Assistant Deans of Trinity College and the Woman's College, the Dean of the Graduate School, the Secretary of the General Faculty, the Chairman and Director of Undergraduate Studies in each department offering instruction in the undergraduate colleges of liberal arts and sciences, one additional member elected by each department that has five or more teachers giving instruction in arts and sciences, and such others as may be appointed to membership in the Council by the governing bodies of the University. The Council meets once a month and considers questions of curriculum in the field of arts and sciences and other educational details and policies that are outside the functions of any one faculty.

The Council on Undergraduate Teaching consists of the Deans and Assistant Deans of Trinity College, the Woman's College, the College of Engineering, some other officers and appointed members, and teachers of all ranks who are giving fifty per cent or more of their time to the instruction of undergraduates. Courses to which both Seniors and graduates are admitted are understood as intended primarily for graduate students. The business of this Council is to stimulate good teaching and to find ways and means to make college teachings as effective as possible. It has the right to take such actions as may be necessary to promote these ends.

The Council on the Instruction of Freshmen is composed of the Dean of Undergraduate Instruction, the Dean of Freshmen, and the Supervisor of Freshman Instruction from each department offering courses for Freshmen. It considers policies and matters of detail as affecting Freshman Instruction and also provision for the general welfare of Freshmen. The Freshman Council makes recommendations to the Faculty Council for action in matters of general policy. The Freshman Council has the power to call upon members of the Faculty for reports or other information pertaining to the instruction of Freshmen at such dates as it may determine.

The Council on Education for Women consists of the Dean of the Woman's College and of one representative from each department offering courses which are largely taken by women students. It shall consider matters of interest and policy relating to the instruction and general welfare of the women students of the University, and make recommendations to the President, or the Faculty Council. The members of the Council on Education for Women are appointed by the President of the University.

The Council of the College of Engineering consists of the Dean of the College of Engineering, the Dean of Undergraduate Studies, the Chairman and one representative from each department of engineering, and three members to be appointed annually by the President from the general faculty representing departments in which students of engineering are required to take work. The Council meets once each month. It is authorized to exercise all educational functions that lie within its field.

The Council on Graduate Instruction consists of members of the Faculty above and including the ranks of associate professors who give at least half of their time to graduate work under the direction of the Graduate School, and others who may be appointed by the Governing Bodies of the University. One member is appointed from each of the professional schools which give courses for graduate

credit, and in some cases more than one. The Council has to do with whatever pertains to instruction and requirements for degrees in the Graduate School of Arts and Sciences.

The Executive Committee of the Council on Graduate Instruction consists of the Dean and six members appointed by the President upon the recommendation of the Dean. Blanks are distributed once a year to each member of the Council with the request that six names be entered on the blank as his suggestions for members of the Committee. It is understood that the Dean is to take these suggestions into account in his recommendations to the President. Insofar as possible the Humanities, Biological and Physical Sciences, Social Sciences, and other fields are to be represented on the Executive Committee of the Council on Graduate Instruction. No more than four of the six committee members are to be reappointed for any ensuing year.

6. **ACADEMIC YEAR.** The academic year begins on the morning of the Wednesday following September 15. The annual Commencement comes in the week including the first Sunday in June. The Christmas recess begins at 1:00 P.M. December 20 (or December 19 if December 20 falls on Sunday), and ends at 8:00 A.M., January 3 (or January 4 if January 3 falls on Sunday). The spring recess begins at 1:00 P.M. of the Saturday in March nearest to March 25, and ends at 8:00 A.M., of Monday nine days later. Thanksgiving Day is a holiday.

7. **TENURE OF OFFICE.** Teachers of all ranks are subject to removal by the Executive Committee, with the approval of the University Trustees, for misconduct or neglect of duty. Teachers may be elected for terms of one, two, three, or four years; or teachers with the rank of professor may be elected without time-limit. Administrative officers are usually elected without time-limit, but the Executive Committee, with the approval of the University Trustees, may remove any officer of the University whenever, in their opinion, he is not properly performing the duties of his office.

8. The bylaws may be amended at any regular meeting of the University Trustees by the affirmative vote of two thirds of the then membership of the Board, provided that the proposed amendment is submitted through the Secretary of the Board to the members at least twenty days before the meeting.

#### SABBATICAL LEAVE

Sabbatical leave of absence for members of the General Faculty is granted under regulations adopted by the Executive Committee of the Trustees on March 28, 1923, revised in 1928, partly in abeyance in the year 1933-34 and the succeeding three years, and restored in the year 1937-38. The conditions on which sabbatical leave of absence is granted are set forth below.

1. Every member of the General Faculty (composed of professors, associate professors, and assistant professors) is eligible for sabbatical leave after six years in the service of the University. Such leave may be taken for a full year at half salary or a half year at full salary.

2. In order to obtain a sabbatical leave written request for such leave must be filed with the President of the University by December 1 of the academic year preceding the one in which the leave is to take effect.

3. If in exceptional cases it should develop that the granting of leave to an applicant during the year for which application is made would raise very serious difficulties detrimental to the best interests of the applicant's department or school, or the interests of the institution as a whole; or because of questions concerning the applicant's period of service prior to the leave, the President shall appoint a committee which shall have power to decide the question of granting the sabbatical leave for the particular year under consideration. This committee shall consist of five members as follows: two members of the general faculty appointed yearly by the President, the Treasurer of the University, the Dean of the school or college of which the applicant is a member, the chairman of the applicant's department, or should no such chairman exist another member of the applicant's department.

4. If this committee should decide against the granting of a sabbatical leave

for the year for which the applicant applied, the applicant would be eligible for sabbatical leave the following year or any year thereafter upon making application in due form as above.

5. After September 1, 1928, if a member of the faculty on becoming eligible for sabbatical leave does not for some special reason apply for such leave, he may count the additional years of service prior to his leave towards the six years of service necessary before he can apply for a subsequent leave. If in an exceptional case an applicant for personal reasons applies for a sabbatical leave to be effective in advance of his regular year and such leave is granted, he shall not be eligible for a subsequent leave until he has served six years plus the number of years by which this leave is advanced.

6. On recommendation of the committee after leave of absence has been granted it may be postponed for urgent reasons and under conditions to be determined by the committee.

7. All of those cases which have occurred in the past or which may occur in the future in which leave of absence is granted under conditions where the absentee receives full pay for a half year or half pay or more for a full year's leave of absence, shall be considered as regular sabbatical leave under these regulations.

8. These revised regulations became effective as of September 1, 1928, and sabbatical leaves under such regulations began with the academic year 1929-30. The regulations were partly in abeyance in 1933-34, 1934-35, 1935-36, and 1936-37. The restoration of the regulations began with the academic year 1937-38. The four years, 1933-34, 1934-35, 1935-36, and 1936-37, may not count toward the six years of service necessary before application can be made for leave of absence. In all cases in which special arrangements have been made for the granting of sabbatical leave (as described in condition No. 7) during the period of partial abeyance of the plan, the next six years of service shall be counted as beginning with the academic year 1937-38. All other members of the General Faculty who apply for sabbatical leave may count the years of service they had to their credit at the beginning of the academic year 1933-34.

## RETIREMENT

The following resolution was passed by the Board of Trustees on June 5, 1948:

RESOLVED, That the following regulations shall from the date of the adoption of this resolution govern the retirement of all officers and employees of Duke University:

### *I. Retirement.*

Except as provided in Section II of this resolution all officers and employees of Duke University, except the Chancellor and Vice-Chancellor, shall retire at the end of the academic year in which they attain the age of sixty-nine (69), herein called the normal retirement age.

### *II. Extension of Service.*

By special vote of the Board of Trustees individual extensions of service beyond the normal retirement age may be made for a definite period not to exceed one year, but no such extension shall postpone retirement beyond the end of the academic year in which the age of seventy (70) is attained.

### *III. Amendment of Retirement Annuity Plan Adopted October 1, 1925.*

The retirement annuity plan adopted by Duke University on October 1, 1925, is hereby amended in those respects required to conform said plan with the provisions of this resolution.

### *IV. Amendment.*

The University reserves the right at any time to amend these regulations by lowering the retirement age, or altering or abolishing the provision for extension of service, or otherwise.

# Officers of the University for the Year 1950-51



## *The Corporation*

*The date in parenthesis indicates the year of election.*

### THE EXECUTIVE COMMITTEE

WILLIS SMITH (1946), <i>ex officio</i> , Chairman	Raleigh, N. C.
GEORGE GARLAND ALLEN (1923)	New York, N. Y.
ARTHUR HOLLIS EDENS (1948), <i>ex officio</i>	Durham, N. C.
AMOS RAGAN KEARNS (1945)	High Point, N. C.
WILLIAM NEAL REYNOLDS (1933)	Winston-Salem, N. C.
ALEXANDER H. SANDS, JR. (1946)	New York, N. Y.
BUNYAN SNIPES WOMBLE (1950)	Winston-Salem, N. C.
CHRISTINE ALLEN KIMBALL (1945), <i>Recording Secretary</i>	Durham, N. C.

### THE UNIVERSITY TRUSTEES

TRUSTEES WHOSE TERM EXPIRES DECEMBER 31, 1953

NORMAN ATWATER COCKE (1947), <i>Vice-Chairman</i>	Charlotte, N. C.
DONALD SILER ELIAS (1929)	Asheville, N. C.
PLEASANT HUBER HANES (1912)	Winston-Salem, N. C.
JOSEPH LAWRENCE HORNE (1934)	Rocky Mount, N. C.
WALKER INMAN (1949)	Georgetown, S. C.
BENJAMIN EVERETT JORDAN (1943)	Saxapahaw, N. C.
JAMES BUREN SIDBURY (1947)	Wilmington, N. C.
EARLE WAYNE WEBB (1933)	New York, N. Y.

#### FROM THE ALUMNI

SIDNEY SHERRILL ALDERMAN (1934)	Washington, D. C.
EDGAR HARRISON NEASE, SR. (1950)	Charlotte, N. C.
WILLIAM NEAL REYNOLDS (1927)	Winston-Salem, N. C.
WILLIS SMITH (1929), <i>Chairman</i>	Raleigh, N. C.

TRUSTEES WHOSE TERM EXPIRES DECEMBER 31, 1955

GEORGE GARLAND ALLEN (1923)	New York, N. Y.
ROBERT GREGG CHERRY (1934)	Gastonia, N. C.
JESSE PAUL FRIZZELLE (1937)	Snow Hill, N. C.
CALVIN BRYAN HOUCK (1951)	Roanoke, Va.
THOMAS McMILLAN GRANT (1933)	Rocky Mount, N. C.
EDWIN LEE JONES (1945)	Charlotte, N. C.
JAMES RAYMOND SMITH (1934)	Mount Airy, N. C.
ESTELLE FLOWERS SPEARS (1951)	Durham, N. C.

## DUKE UNIVERSITY

## FROM THE ALUMNI

BENJAMIN FERGUSON FEW (1941)	New York, N. Y.
JULIUS WELCH HARRISS (1947)	High Point, N. C.
WILLIAM JULIUS HOBBS (1947)	Atlanta, Ga.
HUBBARD B. PORTER (1941)	Troy, N. C.

## TRUSTEES WHOSE TERM EXPIRES DECEMBER 31, 1957

CHARLES A. CANNON (1949)	Concord, N. C.
HENRY CLAY DOSS (1943)	Detroit, Mich.
PHILLIP FRANK HANES (1948)	Winston-Salem, N. C.
GEORGE MELVIN IVEY (1943)	Charlotte, N. C.
WILLIAM WALTER PEELE (1921)	Laurinburg, N. C.
PAUL LINDSAY SAMPLE (1950)	McKeesport, Pa.
ALEXANDER H. SANDS, JR. (1946)	New York, N. Y.
BUNYAN SNIPES WOMBLE (1915)	Winston-Salem, N. C.

## FROM THE ALUMNI

NORMAN EDWARD EDGERTON (1941)	Raleigh, N. C.
AMOS RAGAN KEARNS (1945)	High Point, N. C.
ROBERT ANDREW MAYER (1897)	Charlotte, N. C.
WALTER ALBERT STANBURY (1933)	Gastonia, N. C.

*Trustees Emeriti*

JAMES ARDREY BELL (1920)	Charlotte, N. C.
ROBERT LEE FLOWERS (1927)	Durham, N. C.
BRODIE C. NALLE (1941)	Charlotte, N. C.

## COMMITTEES OF THE UNIVERSITY TRUSTEES

*Buildings and Grounds:* Messrs. J. R. Smith, Cherry, Jordan, and Kearns.

*Business Administration:* Messrs. P. H. Hanes, Elias, Hobbs, Kearns, Reynolds, and Sands.

*Colleges:* Messrs. Mayer, P. F. Hanes, and Houck, and Mrs. Spears.

*Divinity School:* Messrs. Peele, Edgerton, Grant, Porter, and Stanbury.

*School of Forestry:* Messrs. Cherry, Edgerton, Few, and J. R. Smith.

*Graduate School:* Messrs. Webb, Cannon, Doss, and Sample.

*Law School:* Messrs. Womble, Alderman, Cherry, Cocke, Frizzelle, and P. H. Hanes.

*Library:* Messrs. Doss, Allen, Harriss, and Nease.

*Medical School and Hospital:* Messrs. Elias, Horne, Inman, and Sidbury.

*Physical Education and Athletics:* Messrs. J. R. Smith, Edgerton, P. F. Hanes, Harriss, and Jordan.

*Engineering and Research:* Messrs. Ivey, Cocke, Doss, Jones, Jordan, Sands, and Webb.

*Cooperation with National Council:* Messrs. Sands, Few, Hobbs, Kearns, and Nease.

*Public Relations and Publicity:* Messrs. Horne, Elias, Harriss, and Ivey.

*Officers Emeriti*

ALICE MARY BALDWIN, Ph.D., LL.D.  
*Professor Emerita of History*

406 Swift Avenue

JOSEPH PENN BREEDLOVE, M.A.  
*Librarian Emeritus*

407 Watts Street

\*THADDEUS DILLARD BRYSON, LL.D.  
*Professor Emeritus of Law*

Bryson City, N. C.

\* Died, August 28, 1950.



CHARLES WILLIAM EDWARDS, A.M., M.S. <i>Professor Emeritus of Physics</i>	406 Buchanan Boulevard
WILLIAM STONE FITZGERALD, A.M. <i>Instructor Emeritus of English</i>	603 Watts Street
MRS. LILLIAN B. GRIGGS, B.A. in L.S. <i>Librarian Emeritus</i>	915 Monmouth Avenue
HUGO CLAUDE HORACK, LL.B., LL.D. <i>Professor Emeritus of Law</i>	Arlington, Va.
CHARLES ALBERT KRUMMEL, Ph.D. <i>Professor Emeritus of German</i>	2118 Englewood Avenue
JESSE MARVIN ORMOND, B.D., D.D. <i>Professor Emeritus of Practical Theology</i>	110 Pinecrest Road
ARTHUR SPERRY PEARSE, Ph.D., LL.D. <i>Professor Emeritus of Zoology</i>	803 Second Street
CHARLES WILLIAM PEPPLER, Ph.D. <i>Professor Emeritus of Greek</i>	406 Buchanan Boulevard
GILBERT THEODORE ROWE, S.T.D., D.D., LL.D. <i>Professor Emeritus of Christian Doctrine</i>	150 Pinecrest Road
ELBERT RUSSELL, Ph.D., LL.D. <i>Dean Emeritus of the Divinity School</i>	Mobile, Ala.
MRS. MARY HENDREN VANCE, A.M. <i>Assistant Professor Emeritus of English</i>	New Bern, N. C.
ALBERT MICAJAH WEBB, A.M. <i>Professor Emeritus of Romance Languages</i>	1017 Trinity Avenue
ROBERT NORTH WILSON, M.S. <i>Professor Emeritus of Chemistry</i>	822 Third Street
EDWARD HUDSON YOUNG, A.M. <i>Assistant Professor Emeritus of Romance Languages</i>	107 Watts Street

## *Officers of Administration*

### GENERAL ADMINISTRATION

ARTHUR HOLLIS EDENS, Ph.D., LL.D. <i>President of the University</i>	West Campus
ROBERT LEE FLOWERS, A.M., LL.D. <i>Chancellor of the University</i>	West Campus
WILLIAM HANE WANNAMAKER, A.M., Litt.D. <i>Vice-Chancellor of the University</i>	West Campus
PAUL MAGNUS GROSS, Ph.D. <i>Vice-President in the Educational Division</i>	Hope Valley
CHARLES EDWARD JORDAN, A.B., LL.D. <i>Vice-President in the Division of Public Relations</i>	813 Vickers Avenue
HERBERT JAMES HERRING, M.A., LL.D. <i>Vice-President in the Division of Student Life</i>	2010 Myrtle Drive
ALFRED SMITH BROWER, A.B. <i>Business Manager and Comptroller</i>	1550 Hermitage Court
CHARLES BLACKWELL MARKHAM, A.M. <i>Treasurer of the University</i>	204 Dillard Street

### EDUCATIONAL ADMINISTRATION

PAUL MAGNUS GROSS, Ph.D. <i>Vice-President in the Educational Division</i>	Hope Valley
---	-------------

## The Colleges

HERBERT JAMES HERRING, M.A., LL.D. <i>Dean of Trinity College</i>	2010 Myrtle Drive
ROBERTA FLORENCE BRINKLEY, Ph.D. <i>Dean of the Woman's College</i>	East Campus
WILLIAM HOLLAND HALL, A.M., M.S.C.E. <i>Dean of the College of Engineering</i>	922 Urban Avenue
ALAN KREBS MANCIESTER, Ph.D. <i>Dean of Undergraduate Studies</i>	2016 Myrtle Drive
ROBERT B. COX, A.M. <i>Dean of Undergraduate Men</i>	1107 Ninth Street
EVERETT BROADUS WEATHERSPOON, A.B. <i>Director of Admissions, Trinity College and the College of Engineering</i>	125 Pinecrest Road
MRS. ELIZABETH ANDERSON PERSONS, A.M. <i>Director of Admissions, Woman's College</i>	612 Swift Avenue
ELLEN HARRIS HUCKABEE, A.M. <i>Associate Dean of Undergraduate Instruction, Woman's College</i>	1507 W. Pettigrew Street
MARIANNA JENKINS, Ph.D. <i>Associate Dean of Undergraduate Instruction, Woman's College</i>	2304 Cranford Road
JAMES MATTHEW SLAY, A.M. <i>Assistant Dean of Trinity College</i>	1222 Arnette Avenue
WILLIAM COUNCILL ARCHIE, Ph.D. <i>Assistant Dean in Charge of Freshmen, Trinity College and the College of Engineering</i>	2306 Cranford Road
MARGARET COLEMAN, A.M. <i>Recorder, Trinity College and the College of Engineering</i>	918 Urban Avenue
LOUISE SEABOLT, A.M. <i>Recorder, Woman's College</i>	Faculty Apartments
HELEN MILDRED KENDALL, A.B. <i>Recorder, Divinity School</i>	Faculty Apartments
WILLIAM LAMBETH BRINKLEY, A.B. <i>Field Secretary, Undergraduate Admissions</i>	West Campus
AMY DRAKE, A.B. <i>Field Secretary, Undergraduate Admissions</i>	Erwin Apartments
WILLIAM JACKSON GRIFFITH, A.B. <i>Field Secretary, Undergraduate Admissions</i>	West Campus

## Graduate and Professional Schools

PAUL MAGNUS GROSS, Ph.D. <i>Dean of the Graduate School of Arts and Sciences</i>	Hope Valley
JOSEPH CLARKE ROBERT, Ph.D. <i>Associate Dean of the Graduate School of Arts and Sciences</i>	1102 B Street
JAMES CANNON, A.M., Th.M., D.D. <i>Dean of the Divinity School</i>	803 Second Street
JOSEPH A. McCLAIN, JR., J.S.D., LL.D. <i>Dean of the School of Law</i>	2021 Myrtle Drive
WILBURT CORNELL DAVISON, D.Sc., M.D., LL.D. <i>Dean of the School of Medicine</i>	Hope Valley

FLORENCE K. WILSON, M.A. <i>Dean of the School of Nursing</i>	Faculty Apartments
CLARENCE FERDINAND KORSTIAN, Ph.D. <i>Dean of the School of Forestry</i>	4 Sylvan Road
PAUL HIBBERT CLYDE, Ph.D. <i>Director of the Summer Session</i>	Cole Mill Road
CAZLYN GREEN BOOKIHOOT, Ph.D. <i>Director of the Duke Marine Laboratory</i>	1307 Alabama Avenue
CHARLES EUGENE WARD, Ph.D. <i>Director of Admissions, Graduate School of Arts and Sciences</i>	2429 Perkins Road

## BUSINESS ADMINISTRATION

ALFRED SMITH BROWER, A.B. <i>Business Manager and Comptroller</i>	1550 Hermitage Court
CHARLES BLACKWELL MARKHAM, A.M. <i>Treasurer of the University</i>	204 Dillard Street
CHARLES EDWARD JORDAN, A.B., LL.D. <i>Secretary of the University</i>	813 Vickers Avenue
EDWIN CONSTANT BRYSON, LL.B. <i>University Attorney</i>	Sycamore Street
GERHARD CHESTER HENRICKSEN, C.P.A. <i>Assistant Business Manager and Assistant Comptroller</i>	216 Forest Wood Drive
JOHN M. DOZIER, A.B. <i>Assistant Secretary of the University</i>	2111 Ruffin Street
WILLIAM EDWARD WHITFORD, A.B. <i>Director of Operation and Maintenance</i>	804 Third Street
THEODORE WARREN MINAH, B.S. in H.M. <i>Manager of Dining Hall Operations</i>	2117 Club Boulevard
ISABELLE HOWE, B.S. <i>Manager, the Dining Halls, Woman's College</i>	111 Watts Street
JOHN ELLWOOD DOXEY, A.M. <i>Purchasing Agent</i>	1004 Broad Street
JESSE DAVID WELLONS, JR. <i>Manager of Stores Operations</i>	2703 Augusta Drive
WALTER GLEN COOPER, B.A. <i>Personnel Director</i>	1518 Echo Road
WILLIAM KENNETH HOWARD, B.S. <i>Maintenance Engineer</i>	106 Pinecrest Road
HENRY FRANKLIN BOWERS, A.B. <i>Manager of Operations</i>	Duke University Apartments
ERNEST LEE HAYWOOD, A.B. <i>Chief Accountant</i>	104 Hilton Avenue
JAMES FRANKLIN COUSINS, C.P.A. <i>Auditor</i>	416 Carolina Circle
KENNETH R. MANNING, A.B. <i>Supervisor, Budgets and Reports</i>	900 Midland Terrace
HENRY SPECK MORGAN, A.B. <i>Chief Clerk, Treasurer's Office</i>	409 Francis Street
ROBERT BEVERIDGE FEARING <i>Adviser, Student Activities</i>	1803 Forest Road

CARL A. BOY <i>Superintendent of Utilities</i>	2214 Erwin Road
JOHN C. GIFT <i>Superintendent of Building Maintenance</i>	811 Fifth Street

## PUBLIC RELATIONS

CHARLES EDWARD JORDAN, A.B., LL.D. <i>Vice-President in the Division of Public Relations</i>	813 Vickers Avenue
JOHN M. DOZIER, A.B. <i>Assistant to the Vice-President in the Division of Public Relations; Executive Secretary, University Scholarship Committee</i>	2111 Ruffin Street
EDWARD L. FIKE, A.B. <i>Director, Bureau of Public Information</i>	801 Third Street
EARL W. PORTER, A.B., B.J. <i>Assistant Director, Bureau of Public Information</i>	1013 Dacian Avenue
GLENN EDWARD MANN, A.B. <i>Director, Sports Publicity</i>	Cole Mill Road
FANNIE YARBROUGH MITCHELL <i>Director, Appointments Office</i>	16 Alastair Court

## ALUMNI AFFAIRS

CHARLES AUBREY DUKES, A.B. <i>Director</i>	1309 Oakland Avenue
ANNE GARRARD, A.M. <i>Assistant Director</i>	1023 Gloria Avenue
WILLIAM ALLEN TYREE, A.B. <i>Field Secretary, Duke University Loyalty Fund</i>	610 Buchanan Boulevard
*CODY HEBER SMITH, A.B. <i>Assistant to the Director</i>	2115 Club Boulevard
CHARLOTTE CORBIN, A.B. <i>Assistant to the Director</i>	403 W. Chapel Hill Street
ROGER MARSHALL, A.B. <i>Assistant to the Director and Alumni Editor</i>	1829 Forest Road
THOMAS D. DONEGAN, A.B. <i>Secretary of Local Associations</i>	Westover Park Apartments
PATSY G. MCKAY, A.B. <i>Recorder</i>	Route 2, Roxboro Road

*Officers of Instruction*

## INSTRUCTIONAL STAFF

*All members of the several faculties of the University are included. The date denotes the first year of service.*

FRANCES DOROTHY ACOMB (1945), Ph.D. <i>Assistant Professor of History</i>	Faculty Apartments
†DONALD KEITH ADAMS (1931), Ph.D. <i>Professor of Psychology</i>	2508 Cornwallis Road
RUTH MARGERY ADDOMS (1930), Ph.D. <i>Professor of Botany</i>	1413 North Duke Street
TROGLER F. ADKINS (1938), M.D. <i>Instructor in Obstetrics and Gynecology</i>	2108 Sprunt Street

\* Resigned, January 15, 1951.

† Absent on sabbatical leave, spring semester, 1950-51.

- EDWIN PASCAL ALYEA (1930), M.D.  
*Professor of Urology* Hope Valley
- LEWIS EDWARD ANDERSON (1936), Ph.D.  
*Associate Professor of Botany* 2020 Sunset Avenue
- ROGER FABIAN ANDERSON (1950), Ph.D.  
*Associate Professor of Forest Entomology* 1212 Sixth Street
- WILLIAM BANKS ANDERSON (1930), M.D.  
*Professor of Ophthalmology* 502 East Forest Hills Boulevard
- WILLIAM COUNCILL ARCHIE (1946), Ph.D.  
*Assistant Professor of Romance Languages* 2306 Cranford Road
- JAY MORRIS ARENA (1933), M.D.  
*Associate Professor of Pediatrics* 2032 Club Boulevard
- RALPH ARANOVITZ ARNOLD (1946), M.D.  
*Associate Professor of Otolaryngology and Ophthalmology* 415 Carolina Circle
- ARTHUR GARWOOD ASHBROOK (1947), Ph.D.  
*Assistant Professor of Economics* 1003 Green Street
- \*ROBERT J. ATWELL (1948), M.D.  
*Instructor in Medicine* University Apartments
- THEODORE WINSLOW ATWOOD (1934), D.M.D.  
*Associate in Dentistry* Devon Road, Hope Valley
- THOMAS MALCOLM AYCOCK (1937), M.A.  
*Professor of Physical Education* University Apartments
- JOSEPH RANDLE BAILEY (1946), Ph.D.  
*Assistant Professor of Zoology* Duke University Apartments
- HORACE MITCHELL BAKER, JR. (1948), M.D.  
*Instructor in Surgery* 2315 Wilson Street
- LENOX DIAL BAKER (1937), M.D.  
*Professor of Orthopaedic Surgery* Hope Valley
- MARIE BALDWIN (1949), M.D.  
*Instructor in Neuropsychiatry* Duke Hospital
- †KATHARINE MAY BANHAM (1946), Ph.D.  
*Associate Professor of Psychology* 115 North Dillard Street
- SHERWOOD W. BAREFOOT (1946), M.D.  
*Instructor in Dermatology and Syphilology* Greensboro, N. C.
- JAMES FOSTER BARNES (1929), A.M.  
*Lecturer in Church Music* 2401 Cranford Road
- BETTY GREEN BASON (1949), R.N., B.S.  
*Instructor in Medical Nursing* 2100 Erwin Road
- PAULL FRANKLIN BAUM (1922), Ph.D.  
*Professor of English* 112 Pinecrest Road
- GEORGE JAY BAYLIN (1939), M.D.  
*Professor of Radiology and Associate in Anatomy* 2260 Cranford Road
- WILLIAM WALDO BEACH (1946), Ph.D.  
*Associate Professor of Christian Ethics* 100 Vineyard Street
- ‡JAMES ALLEN BEAL (1939), Ph.D.  
*Professor of Forest Entomology* 2232 Cranford Road
- MRS. DOROTHY WATERS BEARD (1938), R.N.  
*Research Associate in Surgery* Hillsboro, N. C.

\* Resigned, June 30, 1950.

† Absent on leave, 1950-51.

‡ Resigned, September 1, 1950.



- JOSEPH WILLIS BEARD (1937), M.D.  
*Professor of Surgery in Charge of Experimental Surgery;*  
*Associate Professor of Virology* Hillsboro, N. C.
- ROBERT L. BENNETT (1946), M.D.  
*Lecturer in Physical Medicine* Duke Hospital
- KLAUS WILLIAM BERBLINGER (1950), M.D.  
*Associate in Neuropsychiatry* 2318 Huron Circle
- FREDERICK BERNHEIM (1930), Ph.D.  
*Professor of Pharmacology* Woodridge Drive
- MRS. MARY LILIAS CHRISTIAN BERNHEIM (1930), Ph.D.  
*Associate Professor of Biochemistry* Woodridge Drive
- EDWARD WILLARD BERRY (1936), Ph.D.  
*Professor of Geology* 1003 North Gregson Street
- MRS. HELEN SMITH BEVINGTON (1943), M.A.  
*Assistant Professor of English* Guess Road
- MERLE MOWBRAY BEVINGTON (1942), Ph.D.  
*Associate Professor of English* Guess Road
- LUCIUS AURELIUS BIGELOW (1929), Ph.D.  
*Professor of Chemistry* 131 Pinecrest Road
- HAROLD CRUSIUS BIRD (1926), Ph.B., C.E.  
*Professor of Civil Engineering* 1209 Virginia Avenue
- MARTIN LEE BLACK, JR. (1930), M.B.A., C.P.A.  
*Professor of Accounting* 135 Pinecrest Road
- WILLIAM MAXWELL BLACKBURN (1926), Ph.D.  
*Associate Professor of English* 2101 Ward Street
- BERNARD BLACK-SCHAFER (1945), M.D.  
*Associate Professor of Pathology* Piedmont Apartments
- ROBERT LINCOLN BLAKE (1949)  
*Instructor in Medical Art and Illustration* 609 Ruby Street
- HUGO LEANDER BLUMQUIST (1920), Ph.D.  
*Professor of Botany* 922 Demerius Street
- JANET SHIRLEY BLUE (1950), A.B.  
*Visiting Instructor in Romance Languages* 805 Third Street
- EDNA MAY BLUMENTHAL (1950), B.S.  
*Lecturer in Physical Therapy* 1507 West Pettigrew Street
- \*MRS. WANDA SLAYBAUGH BOARDMAN (1947), R.N., A.B., B.S.  
*Instructor in Medical Nursing* 819 Third Street
- WILLIAM BRYAN BOLICH (1927), M.A., B.C.L.  
*Professor of Law* Hope Valley
- EDWARD CLAUDE BOLMEIER (1948), Ph.D.  
*Associate Professor of Education* Faculty Apartments
- GEORGE F. BOND (1949), M.D.  
*Instructor in General Practice of Medicine* Duke Hospital
- ALLAN HADLEY BONE (1944), M.M.  
*Assistant Professor of Music* 2314 Club Boulevard
- †FRANK CUTCHIN BONE (1948), M.D.  
*Instructor in Medicine* 1408 Duke University Road

\* Resigned, April 15, 1950.

† Resigned, June 30, 1950.

CAZLYN GREEN BOOKHOUT (1935), Ph.D. <i>Associate Professor of Zoology</i>	1307 Alabama Avenue
MRS. ELIZABETH CIRCLE BOOKHOUT (1932-43; 1945), M.S. <i>Associate Professor of Physical Education</i>	1307 Alabama Avenue
FRANCIS EZRA BOWMAN (1945), Ph.D. <i>Associate Professor of English</i>	1503 Alabama Avenue
BENJAMIN BOYCE (1950), Ph.D. <i>Professor of English</i>	116 Pinecrest Road
RALPH ANDERS BRACKETT (1949), B.S., Lieutenant, U. S. Navy <i>Assistant Professor of Naval Science</i>	105 Fifth Avenue
DAVID GILBERT BRADLEY (1949), Ph.D. <i>Assistant Professor of Religion</i>	405 Carver Street
CHARLES KILGO BRADSHAW (1939), Ph.D. <i>Associate Professor of Chemistry</i>	2318 Englewood Avenue
JOHN SAEGER BRADWAY (1931), A.M., LL.B. <i>Professor of Law</i>	2621 Stuart Drive
ROYALL N. BRANDIS (1949), M.A. <i>Instructor in Economics</i>	814 Green Street
J. STREET BREWER (1949), M.D. <i>Instructor in General Practice of Medicine</i>	Roseboro, N. C.
ROBERT PALMER BREWER (1949), A.B., Lieutenant, U. S. Navy <i>Assistant Professor of Naval Science</i>	3030 University Drive
JOHN P. BRIGGS (1950), M.D. <i>Instructor in Neuropsychiatry</i>	2413 University Drive
ROBERTA FLORENCE BRINKLEY (1947), Ph.D. <i>Professor of English</i>	East Campus
THOMAS RAY BROADBENT (1950), M.D. <i>Instructor in Surgery</i>	1408 Duke University Road
*ROBERT A. BROOME, JR. (1948), M.D. <i>Instructor in Medicine</i>	University Apartments
CHANDLER WILCOX BROWN (1947), B.S. in C.E. <i>Instructor in Civil Engineering</i>	1423 Woodland Drive
FRANCES CAMPBELL BROWN (1931), Ph.D. <i>Associate Professor of Chemistry</i>	205 Jones Street
IVAN WILLARD BROWN, JR. (1940-42; 1945), M.D. <i>Associate in Surgery</i>	2314 Woodrow Street
WADE G. BROWN (1947), A.B. <i>Instructor in Preventive Medicine and Public Health</i>	Duke Hospital
WILLIAM HUGH BROWNLEE (1948), Ph.D. <i>Assistant Professor of Old Testament</i>	1014 Edith Street
MARSHALL N. BRUCER (1950), M.D. <i>Lecturer in Physiology</i>	Duke Hospital
JEANETTE ELIZABETH BRYANT (1949), R.N., B.S. <i>Instructor in Surgical Nursing</i>	2204 Erwin Road
EDWIN CONSTANT BRYSON (1931), LL.B. <i>Associate Professor of Law, and Instructor in Hospital Administration</i>	1023 Sycamore Street
EVERETT I. BUGG, JR. (1946), M.D. <i>Instructor in Orthopaedics</i>	1544 Hermitage Court

\* Resigned, June 30, 1950.

- THOMAS WADE BURNS (1950), M.D.  
*Instructor in Medicine* 2302 Cranford Road
- JOHN BRADLEY CAHOON (1950), R.T., A.S.X.T.  
*Instructor in X-Ray Technology* University Apartments
- JASPER LAMAR CALLAWAY (1937), M.D.  
*Professor of Dermatology and Syphilology* 828 Anderson Street
- EDMUND MCCULLOUGH CAMERON (1926), A.B.  
*Director of Physical Education and Athletics, and Assistant Coach of Football* Hope Valley
- LACHLAN L. CAMPBELL (1950), M.D.  
*Instructor in Medicine* Aycock Apartments
- \*WILLIAM L. CANINE, JR. (1947), M.A.  
*Instructor in English* Duke University Apartments
- JAMES CANNON, III (1919) A.M., Th.M., D.D.  
*Ivey Professor of History of Religion and Missions* 803 Second Street
- LEONARD CARLITZ (1932), Ph.D.  
*Professor of Mathematics* 2303 Cranford Road
- DAVID WILLIAMS CARPENTER (1929), Ph.D.  
*Professor of Physics* 137 Pinecrest Road
- JOHN WINDER CARR, JR. (1926), Ph.D.  
*Professor of Education* 926 Monmouth Avenue
- EBER MALCOLM CARROLL (1923), Ph.D.  
*Professor of History* University Apartments
- R. CHARMAN CARROLL (1944), R.N., M.D.  
*Associate in Neuropsychiatry* Duke Hospital
- KYLE CARSON (1949), R.N., A.B.  
*Instructor in Medical Nursing* 915 Sixth Street
- BAYARD CARTER (1931), M.D.  
*Professor of Obstetrics and Gynecology* 2111 Myrtle Drive
- NAOMI RUTH CARTER (1949), R.N., B.S.  
*Instructor in Surgical Nursing* 2102 Erwin Road
- CHESTER CASSEL (1949), M.D.  
*Instructor in Medicine* 1203 Ruffin Street
- MRS. HELEN KENNARD CASTELLANO (1947), A.M.  
*Instructor in Romance Languages* 805 Third Street
- JUAN RODRÍGUEZ CASTELLANO (1947), Doctor en Filosofía y Letras  
*Associate Professor of Romance Languages* 805 Third Street
- MRS. ROMA SAWYER CHEEK (1947), Ph.D.  
*Instructor in Political Science* 1011 Dacian Avenue
- BENJAMIN GUY CHILDS (1924), M.A.  
*Professor of Education* 1019 West Markham Avenue
- ROBERT W. CHRIST (1948), M.S.  
*Assistant Librarian* 1403 Watts Street
- MARGARET CHURCH (1946), Ph.D.  
*Instructor in English* Cole Mill Road
- ELON HENRY CLARK (1934)  
*Associate Professor of Medical Art and Illustration* 1300 Oakland Avenue

\* Resigned, September 1, 1950.

- KENNETH WILLIS CLARK (1931), Ph.D.  
*Professor of New Testament* 1308 West Markham Avenue
- LELIA R. CLARK (1949), R.N., M.A.  
*Assistant Professor of Nursing Education* Baker House
- ROBERT W. CLARK (1950), A.B., Captain, U. S. Air Force  
*Assistant Professor of Air Science* 1109 North Gregson Street
- JAMES TOUGH CLELAND (1945), M.A., Th.M.  
*Professor of Homiletics* 2117 Myrtle Drive
- PAUL HIBBERT CLYDE (1937), Ph.D.  
*Professor of History* 406 Cole Mill Road
- CLARENCE H. COBB (1934), Ph.G.  
*Instructor in Hospital Administration* 402 Morehead Avenue
- LOUIS DAVID COHEN (1946), Ph.D.  
*Assistant Professor of Psychology, and Assistant Professor of Neuropsychiatry* 913 Monmouth Avenue
- THEODORE STANLEY COILE (1935), Ph.D.  
*Professor of Forest Soils* Hillsboro Road
- ROBERT TAYLOR COLE (1935), Ph.D.  
*Professor of Political Science* 7 Sylvan Road
- JOHN P. COLLINS (1948), M.D.  
*Instructor in Surgery* 812 Green Street
- JOEL G. COLTON (1947), Ph.D.  
*Instructor in History* University Apartments
- NORMAN FRANCIS CONANT (1935), Ph.D.  
*Professor of Mycology, and Associate Professor of Bacteriology* Old Cornwallis Road
- RICHARD GRIGSBY CONNAR (1950), M.D.  
*Instructor in Surgery* Alastair Apartments
- ROBERT HOWE CONNERY (1949), Ph.D.  
*Professor of Political Science* 906 Buchanan Boulevard
- DANIEL COOK (1950), M.A.  
*Instructor in English* 15 Hawthorne Drive
- ALBERT DERWIN COOPER (1934), M.D.  
*Instructor in Medicine* 1006 Dacian Avenue
- THOMAS HOWARD CORDLE (1950), M.A.  
*Instructor in Romance Languages* 2012 Ward Street
- ALFRED NIXON COSTNER (1950), M.D.  
*Instructor in Ophthalmology* 1124 Forest Hills Boulevard
- FREDERICK AUGUSTUS GRANT COWPER (1918), Ph.D.  
*Professor of Romance Languages* 1017 Dacian Avenue
- HOYLE W. CRAIG (1950)  
*Technical Instructor in Bacteriology* 1207 Alabama Avenue
- ROBERT LAWRENCE CRAIG (1938), M.D.  
*Associate in Neuropsychiatry* Duke Hospital
- HATTIE MILDRED CRAWLEY (1946), R.N., B.S.  
*Instructor in Nursing Arts* Baker House
- ROBERT NOWELL CREADICK (1946), M.D.  
*Assistant Professor of Obstetrics and Gynecology* 2226 Elba Street
- MASON CRUM (1930), Ph.D., Litt.D.  
*Associate Professor of Biblical Literature* 912 Anderson Street

- JOHN SHELTON CURTISS (1945), Ph.D.  
*Associate Professor of History* 718 Vickers Avenue
- ROBERT EARL CUSHMAN (1945), Ph.D.  
*Professor of Systematic Theology* 130 Pinecrest Road
- \*JOHN TINDALL CUTTINO (1946), M.D.  
*Associate in Pathology* 1616 Delaware Avenue
- W. KENNETH CUYLER (1938), Ph.D.  
*Research Instructor in Obstetrics, and Gynecologic Laboratory Technician* Pickett Road
- BINGHAM DAI (1943), Ph.D.  
*Professor of Mental Hygiene and Psychotherapy; Professor of Psychology (Part-time)* 3407 Chapel Hill Street
- WILLIAM DAVID DAVIES (1950), B.D., D.D.  
*Professor of Biblical Theology* Duke University Apartments
- CLARENCE D. DAVIS (1950), M.D.  
*Instructor in Obstetrics and Gynecology and in Endocrinology* 2301 West Club Boulevard
- COURTLAND HARWELL DAVIS, JR. (1950), M.D.  
*Instructor in Neurology* 1803 Hillcrest Drive
- GIFFORD DAVIS (1930), Ph.D.  
*Associate Professor of Romance Languages* 2248 Cranford Road
- MRS. ATALA THAYER SCUDDER DAVISON (1942), M.D.  
*Instructor in Pediatrics* Hope Valley
- WILBURT CORNELL DAVISON (1927), M.D., D.Sc., LL.D.  
*Professor of Pediatrics* Hope Valley
- JOHN ESSARY DEES (1939), M.D.  
*Associate Professor of Urology* 413 Carolina Circle
- MRS. SUSAN COONS DEES (1939), M.D.  
*Associate Professor of Pediatrics and Allergy* 413 Carolina Circle
- JEAN-JACQUES DEMOREST (1948), Ph.D.  
*Assistant Professor of Romance Languages* Carolee Apartments
- WILLIAM ERNEST DETURK (1949), M.D., Ph.D.  
*Assistant Professor of Pharmacology* 1212 Ruffin Street
- FRANK TRAVER DE VYVER (1935), Ph.D.  
*Professor of Economics* 8 Sylvan Road
- DONALD DEWEY (1950), M.A.  
*Assistant Professor of Economics* 124 West Lynch Street
- MACDONALD DICK (1932), M.D.  
*Assistant Professor of Physiology and Pharmacology, and Associate in Medicine* Hope Valley
- ROBERT L. DICKENS (1949), M.S.  
*Instructor in Accounting* Duke University Apartments
- RUSSELL LESLIE DICKS (1948), B.D., D.D., D.Litt.  
*Associate Professor of Pastoral Care* 2308 Prince Street
- †WAKEFIELD DORT (1948), M.S.  
*Instructor in Geology* Duke University
- HUGH DORTCH, JR. (1951), M.D.  
*Associate in Pathology* 2108 Cole Road

\* Resigned, July 1, 1950.

† Resigned, September 1, 1950.



*MRS. MARIE-THERESE LINIERE DOW (1934), L. ès L., M.A. <i>Instructor in Romance Languages</i>	2252 Cranford Road
†NEAL DOW (1934), Ph.D. <i>Assistant Professor of Romance Languages</i>	2252 Cranford Road
FRANCIS GEORGE DRESSEL (1929), Ph.D. <i>Associate Professor of Mathematics</i>	309 Francis Street
KENNETH LINDSAY DUKE (1940), Ph.D. <i>Associate Professor of Anatomy</i>	701 Club Boulevard
BRADFORD DUNHAM (1950), Ph.D. <i>Instructor in Philosophy</i>	603 Watts Street
GEORGE SHARP EADIE (1930), Ph.D. <i>Professor of Physiology and Pharmacology</i>	Hope Valley
WATT WEEMS EAGLE (1930), M.D. <i>Professor of Otolaryngology</i>	804 Anderson Street
RALPH EARLE, JR. (1948), B.S., Captain, U. S. Navy <i>Professor of Naval Science</i>	2101 Myrtle Drive
MRS. ELEANOR BEAMER EASLEY (1934), M.D. <i>Associate in Obstetrics and Gynecology</i>	Guess Road
HOWARD EASLEY (1930), Ph.D. <i>Associate Professor of Education</i>	Guess Road
HARRY CLAUDE MACCOLL EASTMAN (1949), M.A. <i>Instructor in Economics</i>	Alastair Apartments
ARTHUR ROY ECKARDT (1950), Ph.D. <i>Assistant Professor of Religion</i>	2704 Cammie Street
MRS. BARBARA B. ECKERT (1950), R.N., M.A. <i>Clinical Instructor in Pediatric Nursing</i>	1302 Lakewood Avenue
FRANKLIN NICHOLAS EGERTON (1945), A.M., E.E. <i>Assistant Professor of Electrical Engineering</i>	411 North Gregson Street
WILLIAM WHITFIELD ELLIOTT (1925), Ph.D. <i>Professor of Mathematics</i>	Hillandale Road
LEON HUBBARD ELLIS (1947), Ph.D. <i>Lecturer in Political Science</i>	2428 Perkins Road
ERNEST ELSEVIER (1950), M.S. <i>Instructor in Mechanical Engineering</i>	310 South Gregson Street
FRANK LIBMAN ENGEL (1947), M.D. <i>Assistant Professor of Medicine, and Associate in Physiology</i>	2111 Pershing Street
JESSE HARRISON EPPERSON (1930), B.S. <i>Instructor in Preventive Medicine and Public Health</i>	1601 Hermitage Court
MARY ELLEN ESTILL (1949), Ph.D. <i>Instructor in Mathematics</i>	Faculty Apartments
JOHN WENDELL EVERETT (1932), Ph.D. <i>Professor of Anatomy</i>	2605 University Drive
ROBINSON OSCAR EVERETT (1950), LL.B. <i>Assistant Professor of Law</i>	119 North Dillard Street
JOHN MORTON FEIN (1950), Ph.D. <i>Assistant Professor of Romance Languages</i>	Carolee Apartments

\* Absent on leave, fall semester, 1950-51.

† Absent on sabbatical leave, fall semester, 1950-51.

- JAMES RONE FELTS, JR. (1949), A.B.  
*Instructor in Hospital Administration* Charlotte, N. C.
- ARTHUR BOWLES FERGUSON (1939), Ph.D.  
*Assistant Professor of History* 209 Woodridge Drive
- GEORGE BURTON FERGUSON (1937), M.D.  
*Associate in Bronchoscopy* Hope Valley
- JAMES CARL FETTERS (1949), B.A., Captain, U. S. Marine Corps  
*Assistant Professor of Naval Science* 2403 University Drive
- MARSHALL L. FISHER (1949), M.D.  
*Associate in Neuropsychiatry* Roanoke, Va.
- MRS. JULIA FLEMING (1949), R.N., B.S.  
*Instructor in Psychiatric Nursing* Baker House
- WILLIAM JOHNSON FLEMING (1949), M.D.  
*Instructor in Medicine* Randolph Road
- \*ARTHUR H. FLOWER, JR. (1948), M.D.  
*Associate in Dermatology and Syphilology* 2617 Hillsboro Road
- NORMAN FOERSTER (1948), A.M., Litt.D.  
*Visiting Professor in English (Part-time)* Chapel Hill, N. C.
- WILEY DAVIS FORBUS (1930), M.D.  
*Professor of Pathology* Hope Valley
- CHARLES DARBY FULTON, JR. (1950), Sc.D.  
*Assistant Professor of Mechanical Engineering* 1614 University Drive
- LEWIS MCLEOD FULTON, JR. (1949), Ph.D.  
*Instructor in Mathematics* 408 McMannen Street
- OLIVE VALERIA GALLOWAY (1950), B.S., B.S.N.Ed.  
*Clinical Instructor in Medical Nursing* 205 Cornwallis Road
- CLARENCE ELLSWORTH GARDNER, JR. (1930), M.D.  
*Professor of Surgery* Hope Valley
- NORMAN GARNIEZY (1950), Ph.D.  
*Assistant Professor of Psychology* Hope Valley
- †JAMES RICHARD GARRETT (1947), Ph.D.  
*Visiting Instructor in Mathematics* 305 Northwood Circle
- †MRS. LUCILE DRAPER GAULT (1947), M.A.  
*Instructor in Romance Languages* Chapel Hill, N. C.
- JOHN JAY GERGEN (1936), Ph.D.  
*Professor of Mathematics* 2803 Nation Avenue
- ALLAN H. GILBERT (1920), Ph.D.  
*Professor of English* 503 Compton Place
- MRS. KATHARINE EVERETT GILBERT (1930), Ph.D., Litt.D.  
*Professor of Philosophy* 503 Compton Place
- STEPHEN ARNOLD GINN (1950), M.D.  
*Instructor in Neuropsychiatry* 326 Clark Street
- WALKER FORREST GIVAN (1947), Ph.D.  
*Instructor in History* 611 Watts Street
- ‡JOHN C. GLENN, JR. (1949), M.D.  
*Assistant Professor of Radiology* 2204 Pershing Street

\* Resigned, July 5, 1950.

† Resigned, September 1, 1950.

‡ Resigned, January 31, 1951.

- SIDNEY JAMES GOFFARD (1947), Ph.D.  
*Assistant Professor of Psychology* 1003 Lamond Avenue
- CLARENCE L. F. GOHDES (1930), Ph.D.  
*Professor of American Literature* 2614 Stuart Drive
- JOSEPH LEONARD GOLDNER (1950), M.D.  
*Associate in Orthopaedics* 906 Demerius Street
- JEWETT GOLDSMITH (1949), M.D.  
*Associate in Neuropsychiatry* 1517 North Duke Street
- WALTER GORDY (1946), Ph.D.  
*Professor of Physics* 233 Forest Wood Drive
- WILLIAM ALEXANDER GRAHAM (1938), M.D.  
*Instructor in Obstetrics and Gynecology* 2247 Cranford Road
- IRVING EMERY GRAY (1930), Ph.D.  
*Professor of Zoology* 124 Pinecrest Road
- ROBERT EARL GRAY (1950), M.M.  
*Visiting Instructor in Musical Theory and Band Direction* 814 Watts Street
- MAURICE H. GREENHILL (1940), M.D.  
*Associate Professor of Neuropsychiatry* Hope Valley
- EUGENE GREULING (1948), Ph.D.  
*Associate Professor of Physics* 2255 Cranford Road
- KEITH SANFORD GRIMSON (1930-42; 1945), M.D.  
*Professor of Surgery* Hope Valley
- PAUL MAGNUS GROSS (1919), Ph.D.  
*William Howell Pegram Professor of Chemistry* Hope Valley
- \*JULIA REBECCA GROUT (1924), M.S.  
*Professor of Physical Education* 804 Fourth Street
- ROBERT BERGSTROM GUSTAFSON (1949), B.S., Lieutenant, U. S. Navy  
*Assistant Professor of Naval Science* 628 Club Boulevard
- HOWARD N. HAINES (1943), B.S.  
*Assistant Professor of General Engineering* 2307 Club Boulevard
- FRANK GREGORY HALL (1926-42; 1945), Ph.D.  
*Professor of Physiology* 122 Pinecrest Road
- †LOUISE HALL (1931), B.A., S.B. in Architecture, Brevet d'Art  
*Associate Professor of Architecture* Box 6636, College Station
- WILLIAM HOLLAND HALL (1915), A.M., M.S.C.E.  
*Professor of Engineering* 922 Urban Avenue
- JOHN HAMILTON HALLOWELL (1942), Ph.D.  
*Professor of Political Science* 2709 Augusta Drive
- EDWIN CROWELL HAMBLEN (1931), M.D.  
*Associate Professor of Obstetrics and Gynecology, and  
 Professor of Endocrinology* 810 Forest Hills Boulevard
- WILLIAM BASKERVILLE HAMILTON, JR. (1936), Ph.D.  
*Associate Professor of History* 2256 Cranford Road
- PHILIP HANDLER (1939), Ph.D.  
*Professor of Biochemistry and Nutrition* 2307 Sprunt Street
- FRANK ALLAN HANNA (1948), Ph.D.  
*Associate Professor of Economics* 2239 Cranford Road

\* Absent on sabbatical leave, spring semester, 1950-51.

† Absent on sabbatical leave, 1950-51.

- OSCAR CARL EDVARD HANSEN-PRÜSS (1930), M.D.  
*Professor of Medicine in Charge of Clinical Microscopy* Hope Valley
- EARL THOMAS HANSON (1946), Ph.D.  
*Assistant Professor of Political Science* Powe Apartments
- \*WILLIAM MARION HARDY (1946), B.S. in M.E.  
*Instructor in Mechanical Engineering* Chapel Hill, N. C.
- GEORGE THOMAS HARGITT (1930), Ph.D., Sc.D.  
*Professor of Zoology* 811 Watts Street
- ELLWOOD SCOTT HARRAR (1936), Ph.D.  
*Professor of Wood Technology* 2228 Cranford Road
- ROBERT BRENT HARRELL (1950), A.B., Lieutenant Commander, U. S. Navy  
*Associate Professor of Naval Science* University Apartments
- GEORGE PARKER HARRIS (1932), A.B.  
*Instructor in Hospital Administration* Charlotte, N. C.
- JEROME SYLVAN HARRIS (1936), M.D.  
*Professor of Pediatrics, and Associate Professor of Biochemistry* 1007 Rosehill Avenue
- HORNELL NORRIS HART (1938), Ph.D.  
*Professor of Sociology* Cranford Road
- JULIAN DERYL HART (1930), M.D.  
*Professor of Surgery* Duke University Road
- GEORGE CORBIN HARWELL (1935; 1947), Ph.D.  
*Assistant Professor of English* Carolee Apartments
- HERMAN L. HASSELL (1950), R.T.  
*Technical Instructor in X-Ray Technology* Pickett Road
- CHARLES CLEVELAND HATLEY (1917), Ph.D.  
*Professor of Physics* 708 Buchanan Boulevard
- \*MARVIN THOMAS HATLEY, JR. (1946), B.S. in E.E.  
*Instructor in Electrical Engineering* Duke University
- CHARLES ROY HAUSER (1929), Ph.D.  
*Professor of Chemistry* 1020 Rosehill Avenue
- DARRELL MONROE HEDGECOCK (1950), B.S., B.S. in E.E.  
*Instructor in Electrical Engineering* 315 West Trinity Avenue
- CAROLINE ELIZABETH HELMICK (1949), M.D.  
*Associate in Medicine and in Preventive Medicine and Public Health* East Campus
- JAMES PAISLEY HENDRIX (1938), M.D.  
*Assistant Professor of Medicine and Therapeutics* 144 Pinecrest Road
- \*BUEFORD GILBERT HERBERT (1949), LL.M.  
*Acting Assistant Professor of Law* Guess Road
- STEPHEN DUNCAN HERON, JR. (1950), M.S.  
*Instructor in Geology* 311 Leon Street
- DUNCAN CHARTERIS HETHERINGTON (1930), Ph.D., M.D.  
*Professor of Anatomy* University Apartments
- JOSEPH S. HATT, JR. (1949), M.D.  
*Instructor in Medicine* McCain, N. C.
- JOHN BAMBER HICKAM (1947), M.D.  
*Assistant Professor of Medicine* University Apartments

\* Resigned, September 1, 1950.

- FRANKLIN SIMPSON HICKMAN (1927), Ph.D., D.D. 921 West Markham Avenue  
*Professor of Preaching and the Psychology of Religion*
- ARTHUR OWEN HICKSON (1929), Ph.D. 2712 Legion Avenue  
*Assistant Professor of Mathematics*
- DOUGLAS GREENWOOD HILL (1931), Ph.D. Dixon Road  
*Associate Professor of Chemistry*
- JOSEPH MARTIN HITCH (1946), M.D. Raleigh, N. C.  
*Associate in Dermatology and Syphilology*
- MARCUS EDWIN HOBBS (1935), Ph.D. 115 Pinecrest Road  
*Professor of Chemistry*
- JOHN EDWARD HOFEN (1949), A.M. 2318 Huron Circle  
*Instructor in German*
- LESLIE BENJAMIN HOHMAN (1946), M.D. 616 Ruby Street  
*Professor of Neuropsychiatry*
- BERNARD CLEVELAND HOLLAND (1948), M.D. 711 Anderson Street  
*Associate in Medicine*
- RAY WALTER HOLLAND (1947), B.S. in M.E. 2528 Glendale Avenue  
*Instructor in Mechanical Engineering*
- IRVING BRINTON HOLLEY, JR. (1947), Ph.D. Duke University Apartments  
*Instructor in History*
- FRANCES VIRGINIA LEE HOLTON (1947), M.A. Erwin Apartments  
*Assistant Professor of Physical Education*
- \*CALVIN BRYCE HOOVER (1925), Ph.D., Litt.D. 1702 Duke University Road  
*Professor of Economics*
- EDWARD CHARLES HORN (1946), Ph.D. 2509 Cascadilla Street  
*Assistant Professor of Zoology*
- STEPHEN FRANCIS HORNE (1950), M.D. Rocky Mount, N. C.  
*Instructor in Dermatology and Syphilology*
- JAY BROADUS HUBBELL (1927), Ph.D. 121 Pinecrest Road  
*Professor of American Literature*
- \*DON DOUGAN HUMPHREY (1945), Ph.D. 2802 Legion Avenue  
*Professor of Economics*
- MRS. WANDA SANBORN HUNTER (1947), Ph.D. Faculty Apartments  
*Associate Professor of Zoology*
- ROBERT STILWELL HUNTING (1949), M.A. St. Mary's Road  
*Instructor in English*
- CARL A. HYLBURG, JR. (1949), LL.B. Alastair Apartments  
*Instructor in Economics*
- THELMA INGLES (1950), R.N., M.A. Piedmont Apartments  
*Assistant Professor of Nursing Education*
- WILLIAM HENRY IRVING (1936), Ph.D. 2707 Legion Avenue  
*Professor of English*
- CHARLES EDWIN IRWIN (1946), M.D. Duke Hospital  
*Lecturer in Orthopaedic Surgery*
- JAMES O. JACKSON (1950), M.D. 419 Hilton Avenue  
*Instructor in Neuropsychiatry*
- JULIAN E. JACOBS (1936-38; 1947), M.D. 819 Fourth Street  
*Lecturer in Orthopaedics*

\* Absent on leave, spring semester, 1950-51.



- M CRAE JARRETT (1950), B.S.  
*Instructor in Electrical Engineering* 914 West Markham Avenue
- FRANCES CAROLINE JEFFERS (1947), A.M.  
*Assistant Professor of Nursing Education* Baker House
- JAMES LEWIS JENKINS (1950), B.E.E., M.S.E.  
*Instructor in Electrical Engineering* 1212 B Street
- MARIANNA DUNCAN JENKINS (1948), Ph.D.  
*Assistant Professor of Art* 2304 Cranford Road
- HOWARD EIKENBERRY JENSEN (1931), Ph.D.  
*Professor of Sociology* 143 Pinecrest Road
- FREDERICK CHARLES JOERG (1947), M.B.A.  
*Assistant Professor of Economics* 612 Club Boulevard
- AMOS N. JOHNSON (1949), M.D.  
*Instructor in General Practice of Medicine* Garland, N. C.
- \*MYCHYLE WELLINGTON JOHNSON (1937), Ph.D.  
*Associate Professor of Zoology* 106 Turrentine Road
- †BARNEY LEE JONES, (1948), B.D.  
*Instructor in Biblical Literature* 820 Demerius Street
- CARL CANDLER JONES, JR. (1950), M.D.  
*Instructor in Medicine* 2623 Lawndale Avenue
- CLAUDIUS PARKS JONES (1935), M.T.  
*Technical Research Instructor in Obstetrics and Gynecology* 2118 Cole Road
- ARCHIBALD CURRIE JORDAN (1925), A.M.  
*Assistant Professor of English* 147 Pinecrest Road
- BRADY RIMBEY JORDAN (1927), Ph.D.  
*Professor of Romance Languages* 117 Pinecrest Road
- HELEN LOUISE KAISER (1943), R P.T.  
*Associate in Physical Rehabilitation* 804 Fourth Street
- HENRY KAMIN (1948), Ph.D.  
*Instructor in Biochemistry* 2761 Guess Road
- SEYMOUR ROBERT KAPLAN (1950), M.D.  
*Associate in Neuropsychiatry* 1106 Alabama Avenue
- NANCY CATHERINE KEEVER (1950), Ph.D.  
*Visiting Instructor in Botany* 1512 North Duke Street
- WALTER KEMPNER (1934), M.D.  
*Associate Professor of Medicine* 1505 Virginia Avenue
- ‡PHILIP EDWARD KENNEDY (1947), A.M.  
*Instructor in English* 611 Watts Street
- VAN LESLIE KENYON, JR. (1945), B.S.  
*Assistant Professor of Mechanical Engineering* Hillsboro, N. C.
- GRACE PARDRIDGE KERBY (1947), M.D.  
*Instructor in Medicine* Duke Hospital
- GEORGE WALLACE KERNODLE (1949), M.D.  
*Instructor in Pediatrics* Duke Hospital
- VERNON KINROSS-WRIGHT (1949), B.M. (Oxon.), D.P.M.  
*Associate in Neuropsychiatry* Box 79, Route 3

\* Died, September 25, 1950.

† Absent on leave, 1950-51.

‡ Resigned, September 1, 1950.

WILLIAM KLENZ (1947), M.A. <i>Assistant Professor of Music</i>	1216 B Street
*SAMUEL KLIGER (1946), Ph.D. <i>Assistant Professor of English</i>	Faculty Apartments
WALTER GEORGE KLOPFER (1950), Ph.D. <i>Lecturer in Department of Psychology, and Psychologist in Department of Psychiatry</i>	2617 Acadia Street
SIGMUND KOCH (1942-47; 1948), Ph.D. <i>Associate Professor of Psychology</i>	2921 Horton Road
CLARENCE FERDINAND KORSTIAN (1930), Ph.D. <i>Professor of Silviculture</i>	4 Sylvan Road
PAUL JACKSON KRAMER (1931), Ph.D. <i>Professor of Botany</i>	2251 Cranford Road
ROBERT KRAMER (1947), LL.B. <i>Professor of Law</i>	Guess Road
EDWARD K. KRAYBILL (1939), M.S.E. <i>Assistant Professor of Electrical Engineering</i>	900 Dacian Avenue
GEORGE FREDERIC KUDER (1948), Ph.D. <i>Professor of Psychology</i>	2516 Perkins Road
EDWARD CHARLES KUNKLE (1948), M.D. <i>Assistant Professor of Medicine</i>	1302 Oakland Avenue
WESTON LABARRE (1946), Ph.D. <i>Associate Professor of Anthropology</i>	1311 Alabama Avenue
CHARLES EARL LANDON (1926), Ph.D. <i>Associate Professor of Economics</i>	1514 Edgevale Road
JOHN TATE LANNING (1927), Ph.D. <i>Professor of History</i>	Hope Valley
WILLIAM THOMAS LAPRADE (1909), Ph.D. <i>Professor of History</i>	1108 Monmouth Avenue
JOHN E. LARSH, JR. (1943), Sc.D. <i>Associate in Parasitology</i>	Duke Hospital
ELVIN REMUS LATTY (1937), J.D., J.Sc.D. <i>Professor of Law</i>	Hope Valley
†NATALIE L. LAVIN (1949), R.N. <i>Instructor in Pediatric Nursing</i>	1010 First Street
LEWIS LEARY (1941), Ph.D. <i>Professor of American Literature</i>	2106 Woodrow Street
*PAUL R. LEE (1948), M.A. <i>Instructor in English</i>	Epworth Inn
‡BENJAMIN FRANKLIN LEMERT (1930), Ph.D. <i>Associate Professor of Economic Geography</i>	123 Pinecrest Road
HAROLD WALTER LEWIS (1946), Ph.D. <i>Assistant Professor of Physics</i>	1005 Carolina Avenue
MARTHA MODENA LEWIS (1933), M.A. <i>Associate Professor of Physical Education and Dance</i>	Erwin Apartments
RALPH ELTON LEWIS (1941), M.S. in M.E. <i>Assistant Professor of General Engineering</i>	1401 Alabama Avenue

\* Resigned, September 1, 1950.

† Resigned, May 31, 1950.

‡ Absent on sabbatical leave, fall semester, 1950-51.

- ROBERT GUILFORD LEWIS (1949), Ph.D.  
*Instructor in Romance Languages* Alastair Apartments
- CHARLES HARRIS LIVENGOOD, JR. (1946), LL.B.  
*Associate Professor of Law* Hope Valley
- MARIO LLERENA (1948), Doctor en Filosofía y Letras  
*Instructor in Romance Languages* Duke University Apartments
- ARTHUR HILL LONDON, JR. (1932), M.D.  
*Associate in Pediatrics* Corner of Shepherd and Wells Streets
- FREDERICK LONDON (1938), Ph.D., D. ès Sc.  
*Professor of Theoretical Chemistry* 1508 Oakland Avenue
- WILLIAM F. LOVELL (1950), M.D.  
*Instructor in Medicine* 103 Club Boulevard
- \*HANS LÖWENBACH (1940), M.D.  
*Associate Professor of Neuropsychiatry* Apex Road
- CHARLES LUCIEN BAKER LOWNDES (1934), S.J.D.  
*Professor of Law* 2016 Club Boulevard
- OSKAR HELGE LUNDHOLM (1930), Ph.D.  
*Professor of Psychology* 803 Second Street
- †RICHARD SHERMAN LYMAN (1940), M.D.  
*Professor of Neuropsychiatry* 812 Anderson Street
- ANGUS M. MCBRYDE (1931), M.D.  
*Associate Professor of Pediatrics* 410 Forest Hills Boulevard
- JOHN P. MCBRYDE (1950), Ph.D., Major, U. S. Air Force  
*Assistant Professor of Air Science* 2524 State Street
- JOSEPH ADOLPHUS MCCLAIN, JR. (1950), J.S.D., LL.D.  
*Professor of Law* 2021 Myrtle Drive
- MARY THOMPSON MCCORMIC (1950), M.A.  
*Visiting Instructor in Health Education* Faculty Apartments
- JOSEPH MCCrackEN (1946), M.D.  
*Instructor in Medicine* 126 Pinecrest Road
- FORREST DRAPER MCCREA (1930), Ph.D.  
*Associate Professor of Physiology and Pharmacology* 1023 Demerius Street
- MALCOLM McDERMOTT (1930), LL.B.  
*Professor of Law* Orange County, N. C.
- GEOLO McHUGH (1946), Ph.D.  
*Assistant Professor of Psychology* Erwin Road
- FRED HENRY MACINTOSH (1947; 1950), M.A.  
*Visiting Instructor in English* Chapel Hill, N. C.
- †LIONEL WILFRED MCKENZIE, JR. (1948), M.A.  
*Assistant Professor of Economics* Alastair Apartments
- ‡FURMAN GORDON McLARTY (1933), Ph.D.  
*Associate Professor of Philosophy* 1511 Page Street
- CLARENCE MCCAIN McMURRAY (1950), M.D.  
*Instructor in Medicine* 821 Demerius Street
- SAMUEL D. MCPHERSON, JR. (1949), M.D.  
*Instructor in Ophthalmology* 1520 Hermitage Court

\* Absent on leave, 1949-51.

† Absent on leave, 1950-51.

‡ Absent on sabbatical leave, spring semester, 1950-51.

DOUGLAS BLOUNT MAGGS (1930), J.D., S.J.D. <i>Professor of Law</i>	Hope Valley
WILLIAM WAILES MAGRUDER (1948), M.D. <i>Instructor in Neuropsychiatry</i>	Duke Hospital
ALAN KREBS MANCHESTER (1929), Ph.D. <i>Professor of History</i>	2016 Myrtle Drive
PAUL FRANKLIN MANESS (1949), M.D. <i>Instructor in Pediatrics</i>	Duke Hospital
EVERETT JAMES MANN (1950), M.B.A., C.P.A. <i>Associate Professor of Economics</i>	1712 Roxboro Road
LAWRENCE FREDERICK MANSFIELD (1949), M.A. <i>Instructor in Economics</i>	1324 Vickers Avenue
GEORGE MARGOLIS (1947), M.D. <i>Assistant Professor of Pathology</i>	2308 Pratt Street
JOSEPH ELDRIDGE MARKEE (1943), Ph.D. <i>Professor of Anatomy</i>	1015 Demerius Street
SIDNEY DAVID MARKMAN (1947), Ph.D. <i>Assistant Professor of Art</i>	Duke University Apartments
MRS. ELSIE W. MARTIN (1930), M.S. <i>Professor of Dietetics</i>	Faculty Apartments
MRS. RUTH CAMPBELL MARTIN (1944), M.D. <i>Assistant Professor of Surgery in charge of Anesthesiology</i>	113 Pinecrest Road
SAMUEL PRESTON MARTIN (1949), M.D. <i>Associate in Medicine and in Bacteriology</i>	113 Pinecrest Road
*VANCE BACON MARTIN (1949), B.S. in E.E. <i>Visiting Instructor in Electrical Engineering</i>	Hillsboro, N. C.
*CAROLYN P. MASON (1949), B.S. <i>Instructor in Physical Education</i>	Faculty Apartments
LUCY ETHELYN MASSEY (1949), R.N., M.A. <i>Assistant Professor of Public Health Nursing</i>	Baker House
*A. MINETTA MATTHEWS (1947), M.A. <i>Instructor in Romance Languages</i>	Faculty Apartments
MRS. ANNE POWELL MATTHIAS (1950), M.S. <i>Instructor in Physical Education</i>	Chapel Hill, N. C.
WILLIAM CARY MAXWELL (1930), Ph.D. <i>Assistant Professor of German</i>	142 Pinecrest Road
OTTO MEIER, Jr. (1934), B.S. in E.E., M.S., E.E. <i>Associate Professor of Electrical Engineering</i>	916 Monmouth Avenue
ELIJAH EUGENE MENEFFEE, JR. (1940), M.D. <i>Assistant Professor of Medicine</i>	2205 Cranford Road
M. VICTOR MICHALAK (1950), A.M. <i>Instructor in Speech</i>	614 North Gregson Street
OSCAR LEE MILLER (1946), M.D. <i>Lecturer in Orthopaedic Surgery</i>	Charlotte, N. C.
FRANK KIRBY MITCHELL (1926), A.M. <i>Associate Professor of English</i>	619 Swift Avenue
WILFRIED F. H. M. MOMMAERTS (1948), Ph.D. <i>Lecturer in Biochemistry</i>	411 Francis Street

\* Resigned, September 1, 1950.

- JAMES DONALDSON MOODY (1948), M.D.  
*Associate in Surgery* 2708 Legion Avenue
- \*RALPH PIERPONT MORGAN, JR. (1946), B.S. in M.E.  
*Instructor in Mechanical Engineering* 910 Sixth Street
- LOUISE G. MOSER (1949), R.N., M.N.  
*Assistant Professor of Nursing Education* 1004 Markham Avenue
- EARL GEORGE MUELLER (1945), B.M., A.M., M.F.A.  
*Assistant Professor of Art* 1212 Virginia Avenue
- MRS. JULIA WILKINSON MUELLER (1939-41; 1946), M.A.  
*Assistant Professor of Music* 1212 Virginia Avenue
- RICHARD J. F. MURPHY (1948), M.D., C.M.  
*Instructor in Medicine* 1203 Ruffin Street
- WILLIAM D. MURRAY (1951), B.A.  
*Head Football Coach* Duke University
- HIRAM EARL MYERS (1926), S.T.M., D.D.  
*Professor of Biblical Literature* 141 Pinecrest Road
- JACK DUANE MYERS (1947), M.D.  
*Assistant Professor of Medicine* 713 Anderson Street
- †HELEN NAHM (1946), R.N., Ph.D.  
*Professor of Nursing Education* Faculty Apartments
- GLENN ROBERT NEGLEY (1946), Ph.D.  
*Professor of Philosophy* 1700 Shawnee Street
- ERNEST WILLIAM NELSON (1926), Ph.D.  
*Associate Professor of History* 2217 Club Boulevard
- \*HANS NEURATH (1938), Ph.D.  
*Professor of Physical Biochemistry* 2505 Club Boulevard
- MRS. DOROTHY RUTH FRANCE NEWCOMER (1949), M.S.  
*Instructor in Physical Education* 816 Buchanan Boulevard
- HENRY WINSTON NEWSON (1948), Ph.D.  
*Professor of Physics* 111 North Gregson Street
- WILLIAM MCNEAL NICHOLSON (1935), M.D.  
*Associate Professor of Medicine* 824 Anderson Street
- WALTER MCKINLEY NIELSEN (1925) Ph.D.  
*Professor of Physics* 139 Pinecrest Road
- †LOTHAR WOLFGANG NORDHEIM (1937), Ph.D.  
*Professor of Physics* 2255 Cranford Road
- GUY LEARY ODOM (1943), M.D.  
*Associate Professor of Neurosurgery* Hope Valley
- \*JOHN A. OHLSON (1947), M.A.  
*Instructor in Psychology* Garrett Road
- HENRY JOHN OOSTING (1932), Ph.D.  
*Professor of Botany* 2642 University Drive
- ‡HARRY BARRON O'REAR (1948), M.D.  
*Associate in Pediatrics* 1106 Alabama Avenue
- EDWARD STEWART ORGAIN (1934), M.D.  
*Associate Professor of Medicine* Hope Valley

\* Resigned, September 1, 1950.

† Absent on leave, 1950-51.

‡ Resigned, January 1, 1950.



- EFFIE MARIE OSTERMAN (1950), R.N., M.A.  
*Assistant Professor of Nursing Education* 1102 Monmouth Avenue
- AUBREY EDWIN PALMER (1944), B.S. in Engr., C.E.  
*Assistant Professor of Civil Engineering* 2519 State Street
- LEONARD PALUMBO (1950), M.D.  
*Instructor in Obstetrics and Gynecology* 1116 Ninth Street
- HAROLD TALBOT PARKER (1939), Ph.D.  
*Assistant Professor of History* Glenn Apartments
- KARL BACHMAN PATTERSON (1920), A.M.  
*Assistant Professor of Mathematics* 1024 Monmouth Avenue
- ROBERT LEET PATTERSON (1945), Ph.D.  
*Professor of Philosophy* 104 West Forest Hills Boulevard
- LEWIS PATTON (1926), Ph.D.  
*Associate Professor of English* 614 Swift Avenue
- LELA MELISSA PAYNE (1947), M.A.  
*Instructor in Physical Education* Faculty Apartments
- RICHARD L. PEARSE (1938), M.D.  
*Instructor in Obstetrics and Gynecology* 1325 Arnette Avenue
- TALMADGE LEE PEELE (1939), M.D.  
*Associate Professor of Anatomy, and Associate in Medicine* University Apartments
- \*JOHN DEJARNETTE PEMBERTON, JR. (1947), LL.B.  
*Associate Professor of Law* 1920 Ward Street
- KENNETH E. PENROD (1950), Ph.D.  
*Associate Professor of Physiology and Pharmacology* 809 Demerius Street
- EDMUND FRANKLIN PERRY (1950), Ph.D.  
*Instructor in Religion* 1024 Monmouth Avenue
- HAROLD SANFORD PERRY (1932), Ph.D.  
*Associate Professor of Botany* 2302 Cranford Road
- ELBERT LAPSLEY PERSONS (1930), M.D.  
*Assistant Professor of Medicine, and Associate Professor of Preventive Medicine and Public Health* 723 Anderson Street
- RAY C. PETRY (1937), Ph.D., LL.D.  
*Professor of Church History* 128 Pinecrest Road
- JOHN BERNARD PFEIFFER, JR. (1949), M.D.  
*Associate in Medicine* University Apartments
- JAMES HENRY PHILLIPS (1946), Ph.D.  
*Assistant Professor of Biblical Literature* 2517 Perkins Road
- RICHARD H. PHILLIPS (1950), M.D.  
*Associate in Neuropsychiatry* 2515 Pickett Road
- MARSHALL IVEY PICKENS (1932), M.A.  
*Instructor in Hospital Administration* Charlotte, N. C.
- HENRY FLOYD PICKETT (1935), A.B.  
*Instructor in Medical Art and Illustration* 2506 Cornwallis Road
- KENNETH LEROY PICKRELL (1944), M.D.  
*Professor of Plastic Surgery* 3 Sylvan Road
- IRVING PINE (1949), M.D.  
*Associate in Neuropsychiatry* 1701 Englewood Avenue
- \* Resigned, September 1, 1950.

- KENNETH A. PODGER (1949), M.D.  
*Instructor in Obstetrics and Gynecology* 217 Markham Street
- HILDA PERSONS POPE (1948), Ph.D.  
*Associate in Bacteriology* Erwin Apartments
- FRANCIS ROSS PORTER (1930), A.B.  
*Superintendent of the Hospital and Associate Professor of Hospital Administration* Hillsboro, N. C.
- MARY ALVERTA POSTON (1930), A.M.  
*Instructor in Bacteriology* 512 Watts Street
- MARY POTEAT (1935), Ph.D.  
*Assistant Professor of English* Faculty Apartments
- BENJAMIN E. POWELL (1946), Ph.D.  
*Librarian* 626 Swift Avenue
- CHARLES E. PRALL (1949), Ph.D.  
*Visiting Lecturer in Hospital Administration* Greensboro, N. C.
- LANIER WARD PRATT (1940), M.A.  
*Instructor in Romance Languages* 2007 Ruffin Street
- RICHARD LIONEL PREDMORE (1945-46; 1950), D.M.L.  
*Professor of Romance Languages* 2413 Perkins Road
- \*ARTHUR MARCUS PROCTOR (1923), Ph.D.  
*Professor of Education* 2106 Myrtle Drive
- †ALLEN D. PUPPEL (1949), M.D.  
*Associate in Urology* 1500 Ruffin Street
- JAMES MINETREE PYNE (1949), B.S.  
*Instructor in Hospital Administration* 1832 Forest Road
- ‡MAX RADIN (1949), Ph.D., LL.D.  
*Visiting Professor of Law* Duke University
- JACKSON V. RAMBEAU (1949), Ph.B., Lieutenant Colonel, U. S. Air Force  
*Assistant Professor of Air Science* 2421 Perkins Road
- RICHARD BEVERLY RANEY (1934), M.D.  
*Assistant Professor of Orthopaedic Surgery* 1110 Shepherd Street
- ROBERT STANLEY RANKIN (1927), Ph.D.  
*Professor of Political Science* 1107 Knox Street
- WATSON SMITH RANKIN (1932), M.D., D.Sc.  
*Visiting Lecturer in Hospital Administration* Charlotte, N. C.
- \*\*WILLIAM WALTER RANKIN, JR. (1926), M.A.  
*Professor of Mathematics* 1011 Gloria Avenue
- EDWARD SHORE RAPER (1934), A.B.  
*Instructor in Hospital Administration* 2317 Club Boulevard
- ††BENJAMIN ULYSSES RATCHFORD (1928), Ph.D.  
*Professor of Economics* 133 Pinecrest Road
- ALBERT E. RAUH (1949), M.D.  
*Associate in Neurology* Roanoke, Va.
- LEONARD J. RAVITZ (1950), M.D.  
*Instructor in Neuropsychiatry* Duke Hospital

\* Absent on sabbatical leave, spring semester, 1950-51.

† Resigned, January 1, 1951.

‡ Died, June 22, 1950.

\*\* Absent on sabbatical leave, fall semester, 1950-51.

†† Absent on leave, fall semester, 1950-51.

- ISRAEL THOMAS REAMER (1931), Ph.G.  
*Instructor in Pharmacy* 2114 Woodrow Street
- KENNETH JAMES REARDON (1947), A.M.  
*Assistant Professor of English* 2610 Duke Homestead Road
- FREDERICK JEROME REED (1935), M.E., M.S.  
*Associate Professor of Mechanical Engineering* 2203 Englewood Avenue
- ENNIS SAMUEL REES (1949), M.A.  
*Instructor in English* 1813 Hillcrest Drive
- ROBERT JAMES REEVES (1930), M.D.  
*Professor of Radiology* 920 Anderson Street
- \*MRS. WALLY REICHENBERG-HACKETT (1946), Ph.D.  
*Assistant Professor of Psychology* Erwin Road
- FREDERICK P. RENKEN (1950), B.S., Captain, U. S. Air Force  
*Assistant Professor of Air Science* 2523 State Street
- †THOMAS EUGENE RENTZ (1949), B.A.  
*Instructor in Romance Languages* Duke University
- JOSEPH BANKS RHINE (1927), Ph.D.  
*Director of Parapsychology Laboratory* 908 Club Boulevard
- CLAUDE HENRY RICHARDS, JR. (1946), Ph.D.  
*Assistant Professor of Political Science* 1407 North Gregson Street
- †ANNETTE S. RIDER (1949), R.N., B.S.  
*Instructor in Obstetrical Nursing* 915 Chester Street
- †J. ALBERT ROBBINS, JR. (1946), Ph.D.  
*Instructor in English* Faculty Apartments
- JOSEPH CLARKE ROBERT (1938), Ph.D.  
*Professor of History* 1102 B Street
- HENRY STOUTIE ROBERTS, JR. (1948), Ph.D.  
*Assistant Professor of Zoology* Duke Homestead Road
- JOHN HENDERSON ROBERTS (1931), Ph.D.  
*Professor of Mathematics* 2813 Legion Avenue
- ‡LOUIS CARROLL ROBERTS (1933), M.D.  
*Instructor in Urology* 600 North Gregson Street
- WILLIAM M. ROBERTS (1950), M.D.  
*Lecturer in Orthopaedics* Gastonia, N. C.
- ELIOT H. RODNICK (1949), Ph.D.  
*Professor of Psychology, and Director of Clinical Training* 2806 Legion Avenue
- ROBERT SAMUEL ROGERS (1937), Ph.D., F.A.A.R.  
*Professor of Latin and Roman Studies* 148 Pinecrest Road
- THEODORE ROPP (1938), Ph.D.  
*Associate Professor of History* 302 Woodridge Drive
- JESSE LEE ROSE (1936), Ph.D.  
*Assistant Professor of Latin and Greek* East Campus
- NORMAN F. ROSS (1937), D.D.S.  
*Instructor in Dentistry* Hope Valley
- ROBERT ALEXANDER ROSS (1930), M.D.  
*Professor of Obstetrics and Gynecology* 818 Anderson Street

\* Absent on leave, spring semester, 1950-51.

† Resigned, September 1, 1950.

‡ Resigned, January 1, 1951.

- DONALD F. ROY (1950), A.M.  
*Instructor in Sociology* 323 East Trinity Avenue
- MARVIN PIERCE RUCKER (1941), M.D., LL.D.  
*Lecturer in Obstetrics and Gynecology* Richmond, Va.
- JOHN JESSE RUDIN, II (1945), Ph.D.  
*Assistant Professor of Speech* 2122 Englewood Avenue
- \*WALTER RUDIN (1949), Ph.D.  
*Instructor in Mathematics* Duke University
- MABEL F. RUDISILL (1948), Ph.D.  
*Associate Professor of Education* Guess Road
- VICTOR JOHN RUDOLPH (1948), D.F.  
*Assistant Professor of Forest Management* 617 Swift Avenue
- JULIAN MEADE RUFFIN (1930), M.D.  
*Professor of Medicine* 816 Anderson Street
- RALPH WAYNE RUNDLES (1945), Ph.D., M.D.  
*Assistant Professor of Medicine* 132 Pinecrest Road
- \*HOWARD W. RUNKEL (1949), M.A.  
*Instructor in English* 1408 Duke University Road
- REAMES HAWTHORNE SALES (1949), B.D.  
*Instructor in Religion* Duke University Apartments
- MURIEL IONE SANDEEN (1950), Ph.D.  
*Instructor in Zoology* 804 Fourth Street
- CHARLES RICHARD SANDERS (1937), Ph.D.  
*Associate Professor of English* 103 Pinecrest Road
- MRS. EUGENIA CURTIS SAVILLE (1947), M.A.  
*Assistant Professor of Music* Duke University Apartments
- LLOYD BLACKSTONE SAVILLE (1946), Ph.D.  
*Assistant Professor of Economics* Duke University Apartments
- CHARLES HENRY SAWYER (1944), Ph.D.  
*Professor of Anatomy* 2119 Englewood Avenue
- JOHN HENRY SAYLOR (1928), Ph.D.  
*Professor of Chemistry* 707 Club Boulevard
- †WILSON GEORGE SCANLON (1949), M.D.  
*Associate in Neuropsychiatry* 615 Ruby Street
- THOMAS ANTON SCHAFER (1950), B.D.  
*Assistant Professor of Historical Theology* 1819 Hillcrest Drive
- ‡PERITZ SCHEINBERG (1949), M.D.  
*Instructor in Medicine* 227 Dacian Avenue
- CLARENCE HENRY SCHETTLER (1946), Ph.D.  
*Associate Professor of Sociology* 119 Pinecrest Road
- HERMAN MAX SCHIEBEL (1939), M.D.,  
*Associate in Surgery* 1410 Pennsylvania Avenue
- JAMES F. SCHIEVE (1949), D.V.M., M.D.  
*Instructor in Medicine* 2312 Wilson Street
- FREDERICK KENNETH SCHMIDT (1947), M.D.  
*Instructor in Urology* 1927 Ward Street

\* Resigned, September 1, 1950.

† Resigned, July 1, 1950.

‡ Resigned, June 30, 1950.

FRANCIS XAVIER SCHUMAGHER (1937), B.S. <i>Professor of Forestry</i>	6 Sylvan Road
THEODORE B. SCHWARTZ (1948), M.D. <i>Associate in Medicine</i>	Carolee Apartments
*ESTHER LOUISE SCHWERTMAN (1947), M.A. <i>Assistant Professor of Speech</i>	1020 Urban Avenue
GEORGE WILLIAM SCHWERT, JR. (1946), Ph.D. <i>Assistant Professor of Biochemistry</i>	615 Colgate Street
WILL CAMP SEALY (1946), M.D. <i>Assistant Professor of Surgery</i>	919 Monmouth Avenue
WALTER JAMES SEELEY (1925), E.E., M.S. <i>Professor of Electrical Engineering</i>	1005 Urban Avenue
LEE GOODRICH SEWALL (1949), M.D. <i>Assistant Professor of Neuropsychiatry</i>	Roanoke, Va.
DAVID GORDON SHARP (1939), Ph.D. <i>Assistant Professor of Biophysics in Experimental Surgery, and Biophysicist to Duke Hospital</i>	202 Francis Street
LAMBERT ARMOUR SHEARS (1927), Ph.D. <i>Associate Professor of German</i>	917 Green Street
MILDRED MARGUERITE SHERWOOD (1930), R.N. <i>Instructor in Pediatrics</i>	Baker House
JOHN HERMAN SHIELDS (1926), A.M. <i>Associate Professor of Accounting</i>	1315 Vickers Avenue
WILLIAM WARNER SHINGLETON (1947), M.D. <i>Associate in Surgery</i>	Alastair Apartments
†CHARLES K. SIBLEY (1949), M.A., M.F.A. <i>Instructor in Art</i>	704 Holloway Street
ZACHARIAH S. SIKES, JR. (1950), M.D. <i>Associate in Neuropsychiatry</i>	Duke Hospital
JOSEPH ANDREW SILVA (1950), A.M. <i>Instructor in Mathematics</i>	Creedmoor, N. C.
GEORGE A. SILVER (1946), M.D. <i>Associate in Neuropsychiatry</i>	2005 Arbor Street
SEYMOUR BERTRAM SILVERMAN (1950), M.D. <i>Instructor in Pathology</i>	2724 Stuart Drive
EDWARD CHRISTIAN SIMMONS (1947), Ph.D. <i>Professor of Economics</i>	2510 Perkins Road
WILLIAM HAYS SIMPSON (1930), Ph.D. <i>Associate Professor of Political Science</i>	1406 Dollar Avenue
WILLIAM VANCE SINGLETARY (1948), M.D. <i>Instructor in Medicine</i>	2018 Sprunt Street
MARY CLYDE SINGLETON (1950), B.S., R.P.T. <i>Instructor in Physical Therapy</i>	2039 Englewood Avenue
BENJAMIN SMITH SKINNER (1946), M.D. <i>Instructor in Pediatrics</i>	403 Jackson Street
†GRIMES GIBBONS SLAUGHTER (1948), B.S. in E.E. <i>Instructor in Electrical Engineering</i>	1003 Green Street

\* Absent on leave, fall semester, 1950-51.

† Resigned, September 1, 1950.



- JAMES MATTHEW SLAY (1946), M.A.  
*Instructor in Education* 1222 Arnette Avenue
- DAVID TILLERSON SMITH (1930), M.D., Litt.D.  
*Professor of Bacteriology, and Associate Professor in Medicine* Hope Valley
- DOROTHY MARY SMITH (1950), R.N., M.Ed.  
*Assistant Professor of Nursing Education, and Director,  
Division of Nursing Education* 205 Cornwallis Road
- HILRIE SHELTON SMITH (1931), Ph.D., D.D., Litt.D.  
*Professor of American Religious Thought* 1523 Hermitage Court
- PRESTON WILLIAM SMITH (1950)  
*Technical Instructor in Hematology* 1401 Canterbury Circle
- ROBERT SIDNEY SMITH (1932), Ph.D.  
*Professor of Economics* 2236 Cranford Road
- MRS. SUSAN GOWER SMITH (1930), M.A.  
*Associate in Nutrition* Hope Valley
- WILLIAM VICK SMITH (1946), Ph.D.  
*Associate Professor of Physics* 1208 Dwire Place
- MARY HELEN SNIVELY (1930), M.A., A.N.A.  
*Instructor in Anesthesiology* 2913 Horton Road
- WILLIAM BREWSTER SNOW (1948), B.S. in C.E., M.S., Sc.D.  
*Associate Professor of Civil Engineering* 1022 West Trinity Avenue
- MRS. BESSIE WHITTED SPENCE (1929), A.M.  
*Assistant Professor of Biblical Literature* Hope Valley
- HERSEY EVERETT SPENCE (1918), B.D., D.D., Litt.D.  
*Professor of Biblical Literature and Religious Education* Hope Valley
- JOSEPH JOHN SPENGLER (1934), Ph.D.  
*Professor of Economics* 2240 Cranford Road
- HERTHA D. E. SPONER (1935), Ph.D.  
*Professor of Physics* Hope Valley
- DALE FISHER STANSBURY (1946), J.S.D. 1008 West Trinity Avenue  
*Professor of Law, and Faculty Director of Law Library*
- HELEN STARKE (1948), M.D.  
*Associate in Medicine* Cole Mill Road
- EUGENE ANSON STEAD, JR. (1947), M.D.  
*Florence McAlister Professor of Medicine* 2122 Myrtle Drive
- CHARLES RONALD STEPHEN (1950), M.D.C.M.  
*Associate Professor of Anesthesiology* 1509 Carolina Avenue
- HARRY R. STEVENS (1947), Ph.D.  
*Assistant Professor of History* University Apartments
- WILLIAM FRANKLIN STINESPRING (1936), Ph.D.  
*Professor of Old Testament* 1107 Watts Street
- JOSEPH HAROLD ST. JOHN, JR. (1949), M.D.  
*Instructor in Medicine* Creedmoor, N. C.
- FREDERICK WILLIAM STOCKER (1943), M.D.  
*Associate Professor of Ophthalmology* 1124 Forest Hills Boulevard
- LELAND DOUGLAS STODDARD (1947), M.D.  
*Associate in Pathology* 1406 Duke University Road
- EDWARD STONE (1949), Ph.D.  
*Instructor in English* 818 Sixth Street

- HARRIETTE STRIPLING (1950), Doctor de L'université  
*Visiting Instructor in Romance Languages* 715 Burch Avenue
- HOWARD AUSTIN STROBEL (1948), Ph.D.  
*Instructor in Chemistry* West Campus
- WIPPERT ARNOT STUMPF (1948), Ph.D.  
*Associate Professor of Education* 127 Pinecrest Road
- CHARLES WOODROW STYRON (1946), M.D.  
*Associate in Medicine* Duke Hospital
- HERBERT WILFRID SUGDEN (1929), Ph.D.  
*Assistant Professor of English* University Apartments
- ROBERT BURKE SUITT (1940), M.D.  
*Assistant Professor of Neuropsychiatry* 1131 Dollar Avenue
- EDWARD THOMAS SULLIVAN (1950), M.F.  
*Visiting Instructor in Forest Economics* 1105 Virginia Avenue
- ELIZABETH READ SUNDERLAND (1939-42; 1943), Ph.D.  
*Assistant Professor of Art* Alastair Apartments
- GEORGE FRASER SUTHERLAND (1948), M.D.  
*Associate Professor of Neuropsychiatry* Forest Hills Boulevard
- LOUIS EARL SWANSON (1949), A.B.  
*Instructor in Hospital Administration* 2610 Shenandoah Avenue
- MRS. MARTHA GRACY SWASEY (1946), M.A.  
*Assistant Professor of Physical Education* Duke University Apartments
- BYRON R. SWITZER (1949), B.S., Colonel, U. S. Air Force  
*Professor of Air Science* 2402 Chapel Hill Road
- \*CHARLES SACKETT SYDNOR (1936), Ph.D., Litt.D.  
*Professor of History* 116 Pinecrest Road
- †HARVEY GRANT TAYLOR (1940), M.D.  
*Associate Professor of Pediatrics and Bacteriology, and Assistant Dean of Medical School* Hillsboro, N. C.
- HAYWOOD MAURICE TAYLOR (1930), Ph.D.  
*Associate Professor of Biochemistry, and Professor of Toxicology* 2620 University Drive
- JOSEPH MILLER THOMAS (1930), Ph.D.  
*Professor of Mathematics* 2215 Cranford Road
- WALTER LEE THOMAS, JR. (1932-35; 1937-42; 1945), M.D.  
*Associate Professor of Obstetrics and Gynecology* Hope Valley
- ‡EDGAR TRISTRAM THOMPSON (1935), Ph.D.  
*Professor of Sociology* 138 Pinecrest Road
- FREDERICK A. THOMPSON, JR. (1950), M.D.  
*Instructor in Medicine* 2510 Shenandoah Avenue
- \*\*ROY BERTRAND THOMSON (1938), Ph.D.  
*Professor of Forest Economics* 2243 Cranford Road
- MARTIN BICE TRAVIS, JR. (1949), Ph.D.  
*Assistant Professor of Political Science* 1405 Watts Street
- JAMES NARDIN TRUESDALE (1930), Ph.D.  
*Assistant Professor of Greek* Faculty Apartments
- MRS. VIOLET HORNER TURNER (1943), M.D.  
*Instructor in Obstetrics and Gynecology* 2106 Cole Road

\* Absent on sabbatical leave, 1950-51.

† Absent on leave, 1949-51.

‡ Absent on sabbatical leave, spring semester, 1950-51.

\*\* Died, July 28, 1950.

- \*LUELLA JANE UIRIHANE (1947), B.N., B.S.  
*Instructor in Health Education* Erwin Apartments
- \*CHARLES ROWE VAIL (1939), B.S. in E.E., M.S. (E.E.)  
*Assistant Professor of Electrical Engineering* 900 Dacian Avenue
- CLYDE J. VAN ARSDALL, JR. (1948), B.S., Commander, U. S. Navy  
*Associate Professor of Naval Science* 421 Carolina Circle
- CLEMENT VOLLMER (1926), Ph.D.  
*Professor of German* 2114 Myrtle Drive
- HERBERT VON BECKERATH (1935), Ph.D.  
*Professor of Economics and Political Science* Hope Valley
- WARREN CHASE VOSBURGH (1928), Ph.D.  
*Professor of Chemistry* 2319 Englewood Avenue
- CARL M. VOYLES, JR. (1950), M.D.  
*Instructor in Medicine* 1112 Buchanan Boulevard
- ALBERT EDWARD WACKERMAN (1938), M.F.  
*Professor of Forest Utilization* Hope Valley
- †WILLIAM WALLACE WADE (1931), A.B.  
*Head Coach of Football* 2022 Myrtle Drive
- ‡FRED REESE WAGNER (1950), M.A.  
*Instructor in English* 905 Second Street
- JAMES ELIAS WALTER (1950), I.A.  
*Instructor in Economics* 508 East Geer Street
- ARLEY JOHN WALTON (1948), B.S.L., D.D.  
*Associate Professor of Practical Theology, and Director of Field Work* 815 Third Street
- LORING BAKER WALTON (1929), Lic. ès L., Ph.D.  
*Professor of Romance Languages* 2235 Cranford Road
- PAUL K. S. WANG (1950), D.Sc.  
*Visiting Professor of Physics* 2401 Cranford Road
- CHARLES EUGENE WARD (1927), Ph.D.  
*Associate Professor of English* 2429 Perkins Road
- JOHN RUSH WARREN (1946), Ph.D.  
*Instructor in Botany* 2002 Ruffin Road
- WILLIAM THURMAN WATKINS, JR. (1950), M.D.  
*Instructor in Dermatology and Syphilology* 2509 Glendale Avenue
- GEORGE ARCHIBALD WATSON (1950), M.D.  
*Instructor in Pediatrics* 2018 Sunset Avenue
- RICHARD LYNNESS WATSON, JR. (1939), Ph.D.  
*Assistant Professor of History* 109 Pinecrest Road
- VERNON ELGIN WAY (1930), A.M., M.A.  
*Assistant Professor of Greek* 918 Urban Avenue
- BAILEY DANIEL WEBB (1949), M.D., Ph.D.  
*Instructor in Pediatrics* 317 West Trinity Avenue
- KENNETH D. WEEKS (1947), M.D.  
*Instructor in Medicine* University Apartments
- HENRY WEITZ (1950), Ed.D.  
*Associate Professor of Education* 517½ South Duke Street

\* Absent on leave, 1950-51.

† Resigned, January 1, 1951.

‡ Resigned, February 1, 1951.

PAUL WELSH (1948), Ph.D. <i>Assistant Professor of Philosophy</i>	Faculty Apartments
JOSEPH CABLE WETHERBY (1947), M.A. <i>Assistant Professor of Speech</i>	2306 Prince Street
*GEORGE WILLARD WHARTON, JR. (1939), Ph.D. <i>Associate Professor of Zoology</i>	1202 Oval Drive
JOSEPH WARREN WHITE (1946), M.D. <i>Lecturer in Orthopaedic Surgery</i>	Duke Hospital
MRS. MARIE ANNE UPDIKE WHITE (1930), A.M. <i>Assistant Professor of English</i>	107 Pinecrest Road
MRS. EUGENIA LEA REMELIN WHITRIDGE (1947), Ph.D. <i>Assistant Professor of Sociology</i>	Cornwallis Road
ALBAN GREGORY WIDGERY (1930), M.A. <i>Professor of Philosophy</i>	152 Pinecrest Road
RUTH JANET WIEN (1949), M.S. <i>Associate in Medical Social Service</i>	University Apartments
THOMAS G. WIENER (1948), Ph.D. <i>Assistant Professor of Russian Language and Literature</i>	1808 Hillcrest Drive
KARL MILTON WILBUR (1946), Ph.D. <i>Professor of Zoology</i>	3409 Chapel Hill Road
LESLIE CLIFFORD WILBUR (1949), B.S., M.S. <i>Instructor in Mechanical Engineering</i>	1208 East Geer Street
RALPH SYDNEY WILBUR (1933), B.S. in M.E., M.E. <i>Professor of Mechanical Engineering</i>	1018 Demerius Street
†JESSE HOLLAND WILDER (1948), B.S. in M.E., M.S. <i>Instructor in General Engineering</i>	2219 Club Boulevard
PELHAM WILDER, JR. (1949), Ph.D. <i>Instructor in Chemistry</i>	2325 Farthing Street
WILLIAM EDGAR WILKINSON (1949), M.D. <i>Professor of Military Science and Tactics, and Associate in Neuropsychiatry</i>	1204 Ruffin Street
D. MCGREGOR WILLIAMS (1947), B.S. <i>Lecturer in Preventive Medicine and Public Health</i>	1107 Alabama Avenue
JAMES WESLEY WILLIAMS (1937), A.B., B.S. in C.E., M.S. <i>Assistant Professor of Civil Engineering</i>	206 Swift Avenue
PHILLIP WILLIAMS, JR. (1949), Ph.D. <i>Assistant Professor of English</i>	Faculty Apartments
FLORENCE KISSICK WILSON (1946), R.N., M.A. <i>Professor of Nursing Education</i>	Faculty Apartments
FREDERICK ELIPHAZ WILSON (1923), A.M. <i>Associate Professor of German</i>	1020 Demerius Street
‡MARDIS GLEN WILSON, JR. (1949), M.A. <i>Instructor in English</i>	905 Second Street
ROBERT RENBERT WILSON (1925), Ph.D., LL.D. <i>Professor of Political Science, and Lecturer in International Law</i>	717 Anderson Street
WILLIAM PRESTON WILSON (1950), M.D. <i>Instructor in Neuropsychiatry</i>	Fayetteville Road

\* Absent on sabbatical leave, 1950-51.

† Resigned, February 1, 1951.

‡ Resigned, September 1, 1950.

LOREN RALPH WITHERS (1949), M.S. <i>Assistant Professor of Music</i>	Duke University Apartments
FREDERICK ADOLPHUS WOLF (1927), Ph.D. <i>Professor of Botany</i>	924 Urban Avenue
BARNES WOODHALL (1937-43; 1945), M.D. <i>Professor of Neurosurgery</i>	Hope Valley
JAMES W. WOODS (1949), M.D. <i>Instructor in Medicine</i>	1404 Oakland Avenue
ROBERT HILLIARD WOODY (1929), Ph.D. <i>Associate Professor of History</i>	2648 University Drive
MRS. ELEANOR JANE HERRING WOOTEN (1946), M.D. <i>Instructor in Pediatrics</i>	Duke Hospital
DEWITT WRIGHT (1943), J.D. <i>Instructor in Hospital Administration</i>	Hillsboro, N. C.
WARREN GRICE YATES (1949), A.M. <i>Instructor in German</i>	409 Carver Street
DAVID A. YOUNG (1946), M.D. <i>Lecturer in Neuropsychiatry</i>	Duke Hospital
*FRANKLIN WOODROW YOUNG (1945), Ph.D. <i>Assistant Professor of Biblical Theology</i>	Duke University Apartments
KARL EDWARD ZENER (1928), Ph.D. <i>Professor of Psychology</i>	Sparger Road
HALINA ZUKOWSKI (1950), R.N., B.S., M.L. <i>Instructor in Psychiatric Nursing</i>	Baker House

## PART-TIME INSTRUCTORS

DOUGLAS R. ALLENSON (1950), M.A. <i>Chemistry</i>	Guess Road
CARROLL RAYBOURNE BALL (1950), M.S. <i>Zoology</i>	Westover Park Apartments
WADE THOMAS BATSON, JR. (1950), A.M. <i>Botany</i>	Creedmoor, N. C.
WILLIAM WARD BROWN (1949), Ph.D. <i>Physics</i>	Duke University Apartments
EDWARD REAP BUCKNER (1950), B.S. <i>Geology</i>	Chapel Hill, N. C.
MRS. JEAN CASALE BURKUS (1950), A.M. <i>Zoology</i>	2518 Englewood Avenue
BENJAMIN THEODORE COLE (1950), B.S. <i>Zoology</i>	Hope Valley
GEORGE ARTHUR DELHOMME, JR. (1950), M.A. <i>Latin</i>	1503 Miami Boulevard
RONALD D. EMMA (1949), B.A. <i>Economics</i>	1010 Gloria Avenue
FRED ERWIN FRIEND (1950), A.M. <i>English</i>	1215 Sixth Street
JOHN CALDWELL GUILDS, JR. (1948), M.A. <i>English</i>	818 Sixth Street

\* Resigned, February 1, 1951.



MRS. MARTHA ZANT HARDY (1947-49; 1950), A.B. <i>English</i>	Chapel Hill, N. C.
ROBERT TAYLOR HERBST (1950), M.S. <i>Mathematics</i>	812 Madison Street
WILLIAM LAWRENCE HIGHFILL (1950), B.D. <i>Latin</i>	Route 1, Box 88
NORMAN DAVIS KNOX (1950), A.B. <i>English</i>	409 North Gregson Street
JOSEPH BURCH KYLE (1950), A.M. <i>History</i>	Creedmoor, N. C.
FRANK ROLAND OLSON (1950), M.A. <i>Mathematics</i>	1106 Burch Avenue
WILLIAM ALLAN POWELL (1949), B.S. <i>Chemistry</i>	Duke University Apartments
DAVID RABIN (1948), B.S. in M.E. <i>Mechanical Engineering</i>	2014 Bivins Street
JAMES BRADY REECE (1948-50; 1951), A.M. <i>English</i>	1004 Shepherd Street
HORACE LEWIS SAWIN (1951), M.A. <i>English</i>	West Campus
WILLIAM CHARLES SEYLER (1950), M.A. <i>Political Science</i>	2401 University Drive
WILLIAM RODGER SMYTHE, JR. (1950), B.S. <i>Mathematics</i>	634 Colonial Drive
RALPH FRANCIS TRAMBARULO (1950), Ph.D. <i>Physics</i>	920 Buchanan Boulevard
NORMAN WILKS (1950), M.S. <i>Zoology</i>	1217 Rosedale Avenue
ARTHUR BRUCE WINTER (1950), M.A. <i>Political Science</i>	300 Leon Street

## INSTRUCTIONAL ASSISTANTS

## Legal Aid Clinic

SUMTER C. BRAWLEY, JR. (1946), LL.B.	2305 Club Boulevard
SAMUEL FOX GANTT (1949), LL.B.	University Apartments
CHARLES FRANKLIN GRIFFIN (1950), LL.B.	West Campus
CARL A. HYLDURG, JR. (1948), LL.B.	Alastair Apartments
ALTON J. KNIGHT (1938), LL.B.	Fish Dam Road

## Physical Education, Trinity College

JAMES ROBERT BLY (1949), M.S. <i>Instructor in Physical Education; Coach of Soccer</i>	1004 Urban Avenue
HAROLD L. BRADLEY (1950), B.S. <i>Instructor in Physical Education; Coach of Basketball</i>	1023 Lakewood Avenue
HERSCHEL AMOS CALDWELL (1930), B.S. <i>Instructor in Physical Education; Coach of Freshman Sports, and Assistant Coach of Football</i>	908 Markham Avenue
ROBERT LEE CHAMBERS (1933), B.S. in Ed. <i>Instructor in Physical Education; Head Coach of Varsity Track</i>	2311 Prince Street

- JOHN WESLEY COOMBS (1929), M.A.  
*Instructor in Physical Education; Head Coach of Varsity Baseball* West Campus
- ROBERT CALVIN COX (1942), M.A.  
*Instructor in Physical Education; Assistant Coach of Football;  
 Coach of Varsity Tennis* 1826 Guess Road
- JACK W. ESICK (1950)  
*Part-time Instructor in Physical Education* 805 Watts Street
- CARMEN M. FALCONE (1946), M.A.  
*Instructor in Physical Education; Coach of Varsity Wrestling;  
 Assistant in Football* University Apartments
- \*KENNETH CHARLES GERARD (1931), B.S.  
*Instructor in Physical Education; Director of Intramural Sports;  
 Coach of Basketball* University Apartments
- ELLIS P. HAGLER (1936), A.B.  
*Instructor in Physical Education; Coach of Varsity Golf;  
 Assistant Coach of Football* 220 Forest Wood Drive
- †FRANCIS PARKS HARRISON (1947), M.A. 2511 Pickett Road  
*Instructor in Physical Education; Assistant Coach of Wrestling*
- DONALD MELVIN HEDSTROM (1949), B.S.  
*Instructor in Gymnastics and Swimming; Coach of Gymnastics* West Campus
- HORACE JAMES HENDRICKSON (1949), A.B.  
*Coach of Freshmen* 1026 Minerva Avenue
- JOHN WILLIAM HENDRIX (1947), M.S.  
*Part-time Instructor in Physical Education; Coach of  
 Varsity Tennis* 220 Forest Wood Drive
- MICHAEL L. KARMAZIN (1948), A.B.  
*Assistant Coach of Football* 2507 Shenandoah Avenue
- HUBERT MURRY LEWIS (1937), B.S.  
*Acting Business Manager of Athletics* Pickett Road
- ROBERT JOHN MONTFORT (1940), B.A.  
*Assistant Instructor in Physical Education* 3300 Cole Mill Road
- CLARENCE MCKAY PARKER (1947)  
*Assistant Coach of Football* Kirkwood Apartments
- WALTER SCOTT PERSONS (1930), A.B.  
*Instructor in Physical Education; Coach of Swimming;  
 Coach of Lacrosse* 612 Swift Avenue

## *Other Officers*

### DUKE UNIVERSITY PRESS

- WILLIAM THOMAS LAPRADE, Ph.D.  
*Acting Director* 1108 Monmouth Avenue
- ASHBEL GREEN BRICE, A.M.  
*Editor and Associate Director* 814 Sixth Street

### RELIGIOUS LIFE

- JAMES TOUGH CLELAND, Th.M.  
*Preacher to the University* 2117 Myrtle Drive
- FRANKLIN SIMPSON HICKMAN, Ph.D., D.D.  
*Preacher to the University* 921 Markham Avenue
- \* Died, January 17, 1951.  
 † Absent on leave, spring semester, 1950-51.

JAMES HENRY PHILLIPS, Ph.D. <i>Director of Religious Activities</i>	2517 Perkins Road
ETHELENE SAMPLEY <i>Director of Religious Activities, Woman's College</i>	Faculty Apartments
CECIL ADDERHOLDT, B.D. <i>Chaplain to Lutheran Students</i>	Duke University
RAY ALLEN, B.D. <i>Chaplain to Methodist Students</i>	903 West Proctor Street
JAMES O. CANSLER, B.D. <i>Chaplain to Baptist Students</i>	321 East Main Street
NORMAN B. GIBBS, B.D. <i>Chaplain to Presbyterian Students</i>	Duke University Apartments
GEORGE A. WORKMAN, B.D. <i>Chaplain to Episcopal Students</i>	903 West Markham Avenue
RUSSELL L. DICKS, B.D., D.D. <i>Chaplain of Duke Hospital</i>	2308 Prince Street

## MUSIC AND ART

JAMES FOSTER BARNES, A.M. <i>Director of Choral Music</i>	2401 Cranford Road
MRS. JAMES FOSTER BARNES <i>Director of Woman's College Glee Club</i>	2401 Cranford Road
ALLAN HADLEY BONE, M.M. <i>Conductor of the Chamber and Symphony Orchestras</i>	2314 Club Boulevard
ROBERT EARL GRAY, M.M. <i>Conductor of the Concert and Marching Bands</i>	814 Watts Street
ANTON BREES <i>University Carillonneur</i>	Duke University
MRS. MILDRED LITTLE HENDRIX, B.S. <i>University Organist</i>	144 Pinecrest Road
MRS. EUGENIA CURTIS SAVILLE, A.M. <i>Conductor of the Madrigal Singers</i>	Duke University Apartments
MARY HELEN STONE, A.B. <i>Art Curator</i>	2114 Club Boulevard

## PHYSICAL EDUCATION AND STUDENT HEALTH

EDMUND McCULLOUGH CAMERON, A.B. <i>Director of Physical Education and Athletics, West Campus</i>	Hope Valley
DAN WINFIELD HILL, A.B. <i>Assistant Athletic Director</i>	2427 Glendale Avenue
JULIA REBECCA GROUT, M.S. <i>Professor of Physical Education, Woman's College</i>	804 Fourth Street
ELBERT LAPSLEY PERSONS, M.D. <i>Director of Student Health</i>	723 Anderson Street
CAROLINE E. HELNICK, M.D. <i>Director of Student Health, Woman's College</i>	East Campus Infirmary
*MRS. BETTY DEW REILLY, R.N. <i>Resident Nurse, Woman's College</i>	East Campus Infirmary
MOZELLE VESTAL, R.N. <i>Resident Nurse, Woman's College</i>	East Campus Infirmary
* Resigned, June 30, 1950.	

MIRIAM A. WILSON, R.N.

*Resident Nurse, Woman's College*

Box 151, Route 1

MRS. OLLIE PHILLIPS BURNETT, R.N.

*Resident Nurse, West Campus*

1404 Arnette Avenue

## RESIDENCE

MARY GRACE WILSON, A.M.

*Dean of Residence, Woman's College*

Faculty Apartments

MRS. FRANCES M. WHITAKER, A.M.

*Assistant to Dean of Residence; Counselor, Brown House*

Brown House

MRS. MARY NORCUTT PEMBERTON

*Hostess, West Campus*

West Campus Union

EVELYN BARNES, B.S.

*Counselor, Alspaugh House*

Alspaugh House

POLLY BARNWELL, A.B.

*Counselor, Pegram House*

Pegram House

JEAN BRACKMAN, B.S.

*Counselor, Bassett House*

Bassett House

MIRIAM J. E. BROWN

*Counselor, Southgate House*

Southgate House

DOROTHY J. MARPLE

*Counselor, Aycock House*

Aycock House

MRS. HARRIET TAYLOR

*Counselor, Giles House*

Giles House

MARY MOSS WELLBORN, A.B.

*Counselor, Jarvis House*

Jarvis House

\*MABEL HAGEMEYER, M.S.

*Production Supervisor, the Dining Halls, Men's College*

1507 W. Pettigrew Street

RUBY MORGAN, B.S.

*Production Supervisor, the Dining Halls, Men's College*

Powe Apartments

JAMES O. COX, JR.

*Personnel Supervisor, the Dining Halls, Men's College*

206 Jones Street

MARVIN G. JOHNSON

*Personnel Supervisor, the Dining Halls, Woman's College*

1304 North Duke Street

LAURA M. DEYOE, B.S.

*Service Supervisor, the Dining Halls, Men's College*

916 Second Street

W. JAMES MILLER, A.B.

*Assistant to the Manager, the Dining Halls, Men's College*

206 Jones Street

MARJORIE KNAPP, B.S.

*Assistant Manager, the Dining Halls, Woman's College*

Southgate House

†MRS. CHRISTIE K. KNUDSEN, B.S.

*Dictitian, Southgate House*

1324 Vickers Avenue

MRS. FRANK VAN DE LINDE, B.S.

*Supervisor, the Dining Hall, Southgate House*

2401 Club Boulevard

*The University Libraries*

BENJAMIN POWELL, Ph.D.

*Librarian*

626 Swift Avenue

ROBERT W. CHRIST, M.S.

*Assistant Librarian*

1403 Watts Street

\* Died, October 9, 1950.

† Resigned, September 1, 1950.

## UNIVERSITY LIBRARY

MRS. DOROTHY W. ATKINS, A.B., B.S. in L.S. <i>Serials Cataloger</i>	1700 Markham Avenue
MRS. MILDRED K. BALDWIN <i>Assistant in charge of Binding</i>	Alastair Apartments
MRS. MARY H. BARNES, A.B. <i>Assistant, Rare Books</i>	1013 Broad Street
MARY ELIZABETH BITTING, M.A. <i>Subject Cataloger and Pamphlets Librarian</i>	2105 Club Boulevard
FLORENCE E. BLAKELY, B.A., B.S. in L.S. <i>Reference Librarian</i>	1004 West Trinity Avenue
ANNA SYBIL CAMERON, A.B. <i>Assistant, Circulation Department</i>	2818 Chelsea Circle
MARY WHITFIELD CANADA, A.M. <i>Undergraduate Librarian</i>	1312 Second Street
ELIZABETH P. CONE, A.B. <i>Assistant, Manuscripts</i>	702 Buchanan Boulevard
LENA COVINGTON, A.B., A.B. in L.S. <i>Head, Subject Cataloging</i>	403 Watts Street
MRS. WILMA CROWELL, B.A. <i>Assistant Periodicals Librarian</i>	Westover Park Apartments
MRS. MINA H. DANIELS, B.A. <i>Assistant, Order Section</i>	924 West Trinity Avenue
MILDRED G. EMMONS, B.A. <i>Serials Cataloger</i>	1004 West Trinity Avenue
ESTHER EVANS, A.B., B.S. in L.S. <i>Subject Cataloger</i>	1007 Urban Avenue
MRS. BETTY R. FARRIS, B.A. <i>Assistant, Serials Section</i>	1018 Buchanan Boulevard
MRS. EVELYN K. GADDY <i>Librarian, Physics-Mathematics</i>	Westover Park Apartments
MRS. ELIZABETH D. GEER, B.A., B.S. in L.S. <i>Reference Librarian</i>	Chapel Hill, N. C.
F. WILBUR HELMBOLD, B.A. <i>Descriptive Cataloger</i>	1707 Angier Avenue
EDWIN J. HIX, B.A., A.B. in L.S. <i>Newspaper and Film Librarian</i>	812 Fourth Street
MRS. EDWINA D. JOHNSON, B.S. <i>Librarian, Biology-Forestry</i>	608 North Gregson Street
JEAN JOHNSON <i>Assistant, Circulation Department</i>	219 West Trinity Avenue
MRS. ETHEL LONG KALE <i>Librarian, Engineering</i>	3325 Chapel Hill Road
DOROTHY F. KIRKLAND, A.B., A.B. in L.S. <i>Descriptive Cataloger</i>	407 Carolina Circle
MRS. EDITH V. KRAMER, M.A. <i>Subject Cataloger</i>	2251 Cranford Road
WILHELMINA LEMEN, A.B., A.B. in L.S. <i>Documents Librarian</i>	2714 Shenandoah Avenue



- GERTRUDE MERRITT, A.B.  
*Chief, Technical Processing* Powe Apartments
- EDWARD J. MEYERS  
*Subject Cataloger* 102 Forest Wood Drive
- MRS. MARGARET B. MOORE, B.A.  
*Bibliographer* 1505 Duke University Road
- HELEN E. OYLER, A.B., B.S. in L.S.  
*Head, Serials Section* 115 Higbee Street
- MRS. MARY A. PANNILL, B.S.  
*Assistant in charge Graduate Reading Room* 901 Fifth Street
- MARY ELEANOR PARKER, B.A., B.S. in L.S.  
*Descriptive Cataloger* 1312 Markham Avenue
- WIXIE E. PARKER, A.B., B.S. in L.S.  
*Periodicals Librarian* Powe Apartments
- MRS. OLGA M. PERLZWEIG, Ph.D.  
*Bibliographer* 407 Swift Avenue
- MRS. CATHARINE J. PIERCE, M.S.  
*Acting Head, Reference Department* 222 Morris Street
- MARY E. PLOWDEN, A.B., A.B. in L.S.  
*Head, Order Section* 108 West Geer Street
- E. GRAHAM ROBERTS, Ph.D.  
*Curator of Manuscripts* 911 Demerius Street
- HONORA L. ROSE  
*Assistant, Order Section* 108 West Geer Street
- MATTIE RUSSELL, M.A.  
*Assistant Curator of Manuscripts* 2209 Woodrow Street
- MARY OPAL SHUFORD, A.B., A.B. in L.S.  
*Descriptive Cataloger* 805 Sixth Street
- THOMAS M. SIMKINS, JR., M.A.  
*Curator of Rare Books* 2313 University Drive
- LENORA RUTH SMITH  
*Librarian, Chemistry* 515 West Chapel Hill Street
- MRS. PHYLLIS F. SMITH  
*Assistant, Circulation Department* 2209 Alabama Avenue
- SHIRLEY STEVENS  
*Assistant, Documents* 601 Watts Street
- JANE STURGEON, B.S., B.S. in L.S.  
*Head, Descriptive Cataloging Section* 115 Higbee Street
- ELLEN L. SUMNER, M.A. in L.S.  
*Bibliographer* 1005 Monmouth Avenue
- MRS. ANNE S. THOMPSON, A.B.  
*Assistant, Serials Section* 804 Second Street
- KATHRYN M. TUTTLE, A.B.  
*Assistant, Newspaper Room* 819 Buchanan Boulevard
- J. P. WAGGONER, JR., B.D.  
*Head, Circulation Department* 605 Tiona Avenue
- MRS. BETTY M. WARREN, A.B.  
*Bibliographer* 2624 Chapel Hill Road
- MRS. JANICE T. WEHMEIER  
*Bookkeeper* 125 West Lynch Street

- \*MARY WESCOTT, A.B., B.S. in L.S.  
*Subject Cataloger* Raleigh, N. C.
- MRS. ERMA P. WHITTINGTON, A.B., B.S. in L.S.  
*Subject Cataloger* 2011 James Street
- MRS. BETTY P. YOUNGBLOOD, B.S.  
*Assistant, Circulation Department* 2347 Huron Circle

## WOMAN'S COLLEGE LIBRARY

- EVELYN J. HARRISON, A.B., B.S. in L.S.  
*Librarian* 403 Watts Street
- MRS. FLORENCE L. FARMER, A.B.  
*Assistant, Circulation Department* 619 West Markham Avenue
- MRS. SPEARS HICKS, A.B., B.S. in L.S.  
*Reference Librarian* 121 West Seeman Street
- FLORINE LEWTER, A.B., A.B. in L.S.  
*Periodicals Librarian* 1512 North Duke Street
- MRS. MARION M. RANDALL, M.A.  
*Cataloger* Faculty Apartments
- MARGARET S. TILLET, A.B., A.B. in L.S.  
*Circulation Librarian* 1405 North Mangum Street
- CATHERINE V. TYSINGER, A.B., B.S. in L.S.  
*Cataloger* 1012 Minerva Avenue

## DIVINITY SCHOOL LIBRARY

- DONN MICHAEL FARRIS, M.S. in L.S.  
*Librarian* 1018 Buchanan Boulevard
- JOYCE G. LOCKHART, A.B.  
*Assistant in Divinity Library* 905 Sixth Street

## LAW SCHOOL LIBRARY

- MARIANNA LONG, A.B., B.S. in L.S.  
*Librarian* 403 Watts Street
- MRS. DULCIE D. BARLOW, B.M.  
*Assistant* University Apartments
- MADELINE COPELAND, A.B., A.B. in L.S.  
*Cataloger* 1018 Monmouth Avenue
- KATHERINE DAY, B.S.  
*Assistant Librarian in charge of Acquisitions* 512 Watts Street
- MRS. JOAN GRAVES  
*Assistant, Circulation* 1640 Cole Mill Road

## MEDICAL SCHOOL LIBRARY

- JUDITH FARRAR, A.B., B.S.  
*Librarian* Faculty Apartments
- MRS. MILDRED PERKINS FARRAR, A.B.  
*Assistant Librarian* Faculty Apartments
- MRS. JESSIE HARNED BUFKIN, R.N., R.R.L.  
*Medical Record Librarian* 2425 Perkins Road

\* Absent on leave, 1950-51.



# UNDERGRADUATE INSTRUCTION

TRINITY COLLEGE

THE WOMAN'S COLLEGE

THE COLLEGE OF ENGINEERING

# The Undergraduate Colleges



DUKE UNIVERSITY is built about a group of colleges which have their roots deep in the past. It was founded more than one hundred years ago when a number of earnest citizens from Randolph and adjacent counties assembled in a log school house to organize an educational society. They wished to provide lasting support for the local academy founded a few months before by an energetic son of North Carolina, Brantley York.

Moved by "no small share of philanthropy and patriotism," these men set forth their belief "that ignorance and error are the bane not only of religious but also of civil society" and that they "rear up almost an impregnable wall between man and the happiness he so ardently pants after." On that basis they formally adopted a constitution for the Union Institute Society. Thus in February, 1839, the academy became Union Institute. Twelve years later the Institute was reorganized as Trinity College. In 1892 it was moved from the fields of Randolph County to the growing city of Durham. Thirty-two years later the College grew into Duke University. With increasing enrolment and the development of specialized needs the Woman's College was formed in 1925 and the College of Engineering in 1938.

From academy to university the basic principles have remained constant. The University motto, *Eruditio et Religio*, reflects a fundamental faith in the union of knowledge and religion, the advancement of learning, the defense of scholarship, the love of freedom and truth, a spirit of tolerance, and a rendering of the greatest service to the individual, the state, the nation, and the church. Through changing generations of students the objective has been to encourage each individual to achieve to the extent of his capacities an understanding and appreciation of the world in which he lives, his relationship to it, his opportunities, and his responsibilities.

Duke University is concerned with developing the whole man. In its classrooms, libraries, and laboratories it is concerned with his mental and moral development, in its gymnasiums and on its playing fields, with his physical growth, and in its chapel and religious program, with his spiritual well being. Although it has always been closely



associated with the Methodist Church, Duke welcomes students of all faiths and encourages them to develop their spiritual lives in accordance with the tenets of their own creeds. The need of training for specialized professions and employments is recognized, but such training is incidental to a larger purpose. Through the variety of the subject matter, the insistence on a common core of fundamental courses, and an emphasis on a more intensive study of some selected subject, the colleges seek to give their students a knowledge and appreciation of the culture of the Western World and at the same time to provide a foundation for careers in business and the professions.

The three colleges exist as parts of a university community in which the student has full opportunity to take part. They have a unique role in this community as the centers of individual education for undergraduates, but as members of the University the colleges share in the extensive facilities of laboratory and field work, superior physical equipment, great libraries, and able faculties which only a major university can provide. They share the same campuses with the Graduate School of Arts and Sciences, the Law School, the Medical and Nursing Schools, the Divinity School, the School of Forestry, and the Duke Hospital. A wide range of activities, religious, intellectual, cultural, social, and athletic, are open to the entire university community. At the same time there are other activities and organizations designed specifically for members of each undergraduate college. The student may thus enjoy both the activities and atmosphere of a small college and the broader facilities and challenges provided by the existence of a university community.

Although the three colleges have separate identities, they are closely inter-related. Students of Trinity College and the College of Engineering live in the same dormitories, belong to the same fraternities, hold membership in the same student government association, attend classes in the same buildings. The College of Engineering provides for the specialized interests of its students by offering training in technical fields. At the same time it recognizes the importance of the study of the humanities because it realizes that the engineer has definite responsibilities as a citizen and that these responsibilities cannot be properly stressed in the purely technical curricula. Engineering students, therefore, participate in the academic and extra-curricula life of the liberal arts college as well as in the training and campus activities peculiar to their own college.

As a coordinate college within the University system the Woman's College shares the advantages of the wider community, and yet it offers to its students the special opportunities which belong to a separate woman's college. Women students receive training in leadership by administering their own organizations and by participating in community projects. At the same time they have the stimulus

which comes from co-educational classes and from the experience of working with men of other colleges in campus activities.

Whether in the classroom or on the campus the emphasis is on the individual. To this end, classes are kept small in size and close contact between professor and student is encouraged. Instructors, counsellors, advisers, and administrative officers are interested in the student as a person. In turn the student is expected to accept the responsibility of contributing to his own development, to his college, and to his university. The relationship of mutual service between the individual student and his college is designed to develop men of intelligence, virtue, and culture. From this relationship there has grown through a century and more a sense of achievement and high competence that enables Duke men and women to take their place in the world as effective citizens whatever their careers may be.

# Admission to the Colleges



**A**PPPLICANTS may qualify for admission as members of the freshman class or as students with advanced standing. Since the enrollment is limited, the Committee on Admissions selects students who, in its judgment, are best qualified to benefit from the educational advantages which the colleges offer. The Committee bases its decision on the academic record of the applicant, on test scores when available, and on satisfactory evidence of good character and general fitness for college life at Duke. A personal interview with an officer of the University or a designated alumnus or alumna is of material benefit to the Committee and the applicant.

**ADMISSION TO THE FRESHMAN CLASS:** An applicant for admission to the freshman class must present at least fifteen acceptable units of secondary-school credit. A unit of credit is allowed for a course of study pursued throughout an academic year in an accredited secondary school, provided five recitations a week have been held and the prescribed amount of work has been completed satisfactorily.

*For admission to Trinity College and the Woman's College* twelve of the fifteen units must be in English, foreign language, history\* and social studies, mathematics, and natural science. They must include three units in English, one unit in algebra, and one unit in plane geometry. The three remaining units may be in the five subjects listed above or they may be selected from the following table. The numeral indicates the maximum amount of unit credit acceptable in each subject:

Agriculture .....	2	Mechanical Drawing .....	2
Art .....	1	Music .....	1
Commercial Subjects .....	3	Physical Geography .....	1
Household Economics .....	2	Woodworking, Machine Work .....	2

Credit for units offered in subjects not included in this list will be considered on the basis of full statements transmitted with the applicant's record from the school recommending him.

*For admission to the College of Engineering* seven of the fifteen units must be in English (3 units), physical science (1 unit), algebra (1½ units), plane geometry (1 unit), and solid geometry† (½ unit). The remaining eight units are elective. At least five of them must

\* Applicants who do not present two acceptable units of history must take history in college.

† Any deficiency in this requirement must be made up before the beginning of the sophomore year.

be in English, foreign language, history and social studies, mathematics, and natural or physical science. It is recommended that these five be chosen from the following list:

English (in addition to the required 3 units) .....	1 unit
Algebra (in addition to the required 1½ units) .....	½ unit
Trigonometry .....	½ unit
Physics or chemistry or biology (in addition to the required unit) ...	1 to 3 units
Foreign languages .....	1 to 4 units
*History and social studies .....	1 to 3 units

The three additional units needed to make the total of fifteen may be chosen from the subjects listed above or they may be selected at large from the following table, which gives the subjects acceptable for entrance credit and the maximum credit acceptable in each subject:

English .....	4	Zoology .....	1
Latin .....	4	General Biology .....	1
Greek .....	3	Physical Geography .....	1
German .....	3	General Science .....	1
French .....	3	Agriculture .....	2
Spanish .....	3	Mechanical Drawing .....	2
Mathematics .....	4	Shop Work .....	2
History and Civics .....	4	Art .....	1
Physics .....	1	Music .....	1
Chemistry .....	1	Commercial Subjects .....	3
Botany .....	1		

**ADMISSION TO ADVANCED STANDING:** An applicant for advanced standing must have fulfilled the equivalent of the requirements for admission to the freshman class, must present official certificates of all work completed in other institutions, and must have an honorable dismissal from each institution previously attended. Credit for work completed will be determined in relation to the curriculum requirements of the college in which the transfer enrolls at Duke University.

A student who transfers with advanced standing to Trinity College or the Woman's College from a junior college or from a four-year college not affiliated with the Southern or a similar regional association must continue, for at least one semester in Trinity College or in the Woman's College, the foreign language he presents for minimum graduation requirements. Credit for courses in science offered for advanced standing by a transfer from a junior college or a non-affiliated four-year college will be determined by the departments concerned.

Applicants for advanced standing in the College of Engineering should present, as far as possible, subjects corresponding to those required by the college. They may not, during their first semester, register for more than the minimum number of hours required of the class which they enter, except by permission of the Dean of the College of Engineering.

\* Applicants who do not present at least one acceptable unit of history must take history in college.

Transfer credits are tentatively evaluated pending the completion of two semesters of work in residence. To validate provisional credits the student must earn at least an average of C in a normal load of work. Transfer grades of C or above are rated at one quality point per credit hour when validated. Credits with grades of D are not acceptable.

The maximum amount of credit acceptable from a junior college is 60 semester hours, exclusive of physical education. No credit is given for work completed by correspondence, and credit for no more than six semester hours is allowed for extension courses. Any extension work accepted must be specifically approved by the dean of the college to which the student seeks admission.

**ADMISSION OF SPECIAL STUDENTS:** Upon the approval of the dean, students of mature age may be admitted for special work in such courses of instruction as they are qualified to take. They may not be admitted as candidates for a degree in a regular course unless they meet all normal requirements for admission.

**ADMISSION PROCEDURE:** Application for admission to Trinity College and the College of Engineering should be made to the Director of Admissions, Trinity College and the College of Engineering, Duke Station, Durham, North Carolina. Application for admission to the Woman's College should be made to the Director of Admissions, Woman's College, College Station, Durham, North Carolina. Application forms and instructions will be sent to the applicant. It is the responsibility of the applicant to see that these forms are properly executed, and, together with other requested material, sent to the designated official.

Application prior to the final year of the secondary-school course is not required. Formal steps looking toward admission should be initiated, however, early in the senior year.

A graduate of an accredited school who submits fifteen acceptable units of secondary-school subjects, who is recommended by his principal, and who otherwise meets the requirements of the Committee on Admissions may be admitted without examination. The certification and recommendation must be on blanks furnished by the college and signed by the principal of the school in which the applicant completed his course. An applicant who presents fifteen acceptable units for admission from a non-accredited school is required to validate these units by entrance examinations and such other tests as the college may prescribe.

**READMISSION OF FORMER STUDENTS:** A student who, following withdrawal from college, desires to return should apply to the appropriate director of admissions. When applying for readmission the student should make a detailed statement of his or her activities since leaving Duke University.



# Financial Information and Living Accommodations



**F**EES paid by the students cover only a part of the cost of their instruction and of the operations of the University. Income from endowment and contributions from the alumni, alumnae, and other public-spirited men and women meet the balance, which constitutes more than half the total cost.

## *Fees*

A registration fee of \$20.00 is required of all new students. This fee is payable only once; it is not refunded. A tuition fee of \$175.00 and a general fee of \$75.00 are payable at the beginning of each semester. The general fee is in lieu of special fees usually charged for matriculation, use of laboratories, student health service, commencement, etc. Special fees for instruction in Applied Music are listed elsewhere in this Bulletin.

Due to rising costs a readjustment in charges, including room-rents, is being considered. In the event of an adjustment applicants will be notified.

An advance deposit of \$25.00 is required of all students in residence at the time of spring registration in order to reserve a place in classes for the fall semester. This is applied toward payment of the general fee at the opening of the fall semester. The deposit will be refunded to students whom the University does not permit to return. Students who of their own volition fail to return are not entitled to a refund.

An advance deposit of \$25.00 is also required of old students who have been out of school for one or more semesters and have been accepted for readmission. It is applied toward payment of the general fee for the semester of readmission. The advance deposit is paid at the time of notification of acceptance and is not refundable.

Refunds of tuition and other fees are made to students who withdraw within 14 days after the beginning of the semester. On and after the fifteenth day all fees are considered as earned and no refunds are made.

Students who register during the regular academic year for no

more than two courses with a maximum credit of 8 semester hours are classified as special students. They are charged a registration fee of \$5.00 for each course, and \$12.00 for each semester hour of course credit. Students taking nine or more hours are charged full fees.

Auditors are permitted to attend classes provided they secure the consent of the instructor. They submit no daily work, take no examinations, and receive no credit. Students taking a full program and paying full fees may audit one or more courses without charge. Students not paying full fees are charged \$10.00 for each course each semester.

Students are entitled to one transcript free of charge. Additional copies are supplied at \$1.00 each. Records are not released when the Treasurer's Office reports an unpaid account.

Students may have their bills sent to parents or guardians provided the Treasurer has been notified in writing with sufficient antecedence. Failure of a student or of a parent or guardian to pay bills on the dates scheduled will debar the student from class attendance until his account is settled in full; subsequent withdrawal does not entitle him to a refund. No student is considered by the Faculty as a candidate for graduation until he has settled with the Treasurer for all his indebtedness to the University. A student who has not settled all his bills with the Treasurer is not allowed to stand the final examinations of the academic year.

### *Estimated Expenses for an Academic Year*

Incidental expenses depend upon the tastes and habits of the individual, but the actual necessary expenses for an academic year are as follows:

	<i>Low</i>	<i>Moderate</i>	<i>Liberal</i>
Tuition .....	\$350.00	\$ 350.00	\$ 350.00
General Fee .....	150.00	150.00	150.00
Room Rent .....	100.00	125.00	175.00
Board .....	325.00	375.00	450.00
Laundry .....	25.00	30.00	35.00
Books .....	20.00	30.00	40.00
	<hr/>	<hr/>	<hr/>
	\$970.00	\$1,060.00	\$1,200.00

The actual fees and expenses necessary for one year in residence as a student in Trinity College, the Woman's College, or the College of Engineering can be met with \$970.00.

### *Student Aid*

Duke University is interested in students with ability and ambition. It is the aim of the University Scholarship Committee and others affiliated with the Student Aid Program to provide, insofar as pos-

sible, the financial assistance required by worthy students. This assistance takes various forms. The actual cost to the University for each student is more than twice the amount received from the student. The deficit is paid out of contributions and income from endowment. Scholarships and prizes enable students with inadequate resources to reduce the amount payable to the University. Loans are made available, and through the Student Employment Offices part-time jobs are arranged. Through the Student Aid Program an earnest effort is made to eliminate the economic status of the student as a criterion for admission.

### *Scholarships*

Scholarships intended to aid needy and deserving students have been established from time to time by persons deeply interested both in Duke University and in the members of its student body. Scholarship endowments are held in trust and are kept separate from other holdings of the University. All income is applied in accordance with the terms of the gift or bequest.

Scholarships are awarded annually by a committee of the Faculty appointed by the President of the University. In some cases donors have specified certain limitations and conditions, but in all cases final award is made by the University Scholarship Committee.

Any prospective student may apply for a scholarship. Applications, however, may be made formally by a prospective student only after his application for admission has been made, all necessary credentials have been presented, and notification of acceptance has been given. Applications are made by letter; they must include, on a form furnished by the University, a complete statement of the applicant's needs. Since the number of scholarships available is small in comparison with the number of applicants, the committee is forced to limit scholarship aid to cases where the need is imperative.

All applications for scholarship aid should be made to the Executive Secretary, the Scholarship Committee, Office of the Secretary, Duke University, Durham, N. C.

The scholarship funds available to undergraduates are listed in the *Bulletin of Undergraduate Instruction*. Awards, made annually, are based on the scholastic standing, the character, and the need of the applicants. Other factors of interest to the Scholarship Committee are extra-curricular activities, church activities, and general promise of achievement.

## *Scholastic Awards and Prizes*

Need is a primary factor in awards made from the funds listed above. There are, in addition, scholarships and prizes based on scholastic merit and promise of leadership. In this group are the honorary scholarships financed through current funds of the University and the Angier Duke Regional Prizes.

Fifteen honorary tuition scholarships are awarded annually to undergraduates. Five are awarded to members of the sophomore class, five to members of the junior class, and five to members of the senior class on the basis of the scholastic work of the preceding year.

Nine Angier Duke Regional Prizes of \$750.00 each are awarded annually to six men and three women. Prizes are awarded for one year and are renewable from year to year for a maximum duration of four years, on the condition that the holder maintain a scholastic average in the upper quartile of his class and further that he show evidence of developing the qualities of leadership which served as the basis for the original selection. When all awards are renewed, there are thirty-six holders of prizes in residence. The total value to the recipient who qualifies for the maximum period is \$3,000.00.

Any resident in the state of North Carolina is eligible to apply regardless of where he or she prepares for college. A candidate may be a graduate of a secondary school, public or private, located within or beyond the borders of the state. Candidates must be eligible for admission to the freshman class of Trinity College, the College of Engineering, or the Woman's College in the ensuing academic year. A candidate must have attained scholastic standing in the highest twenty-five per cent of his or her class as of the closing date of his or her most recently completed semester.

The prizes are intended to encourage as students young men and women who give promise of becoming leaders in their chosen fields of endeavor. As potential leaders they should possess character, personality, intellectual integrity, vitality, and imagination. As students they should possess scholastic ability of a creative sort and minds that can digest and use the knowledge they acquire. The prizes are designed to stimulate young men and women who possess these traits to become citizens with a genuine interest in society and ability to influence and direct the course of affairs.

Applications for one of the prizes awarded either to men or women should be addressed to Mr. John M. Dozier, Office of the Secretary, Duke University, Durham, N. C. The deadline for the receipt of applications is December 15 of the year preceding the year of contemplated entrance.

## *Loans*

A number of loan funds have been established for the benefit of the students of Duke University. The most important and largest is the Angier B. Duke Memorial Student Loan Fund, which is administered through an advisory committee of officers of the University. The amount available to be loaned depends upon the income from investments and on the amount repaid on loans previously made to students. The same committee of officers administers the other endowed loan funds of the University.

The committee in approving loans selects those students who, from the standpoint of character, scholastic attainment, personality, and degree of financial need, are deserving of consideration.

The following regulations govern the operation of the loan fund program:

1. No loan will be made to a student who violates any of the regulations of the University or whose academic record is not satisfactory to the faculty.

2. As a general policy, a student must have spent one semester in residence before he is eligible to apply for a loan. During this period the loan committee will have an opportunity to acquaint itself with the worth and need of the individual applicants.

3. Loans will be made only to students who are taking approved courses of study that lead to a degree, and all loans must be arranged for not later than one week after the beginning of a semester.

4. Every applicant for a loan must obtain the signatures of two substantial people on a note which must be presented to the Treasurer of the University before any money will be advanced. Only one of these co-signers may be a member of a borrower's family.

5. No loan will be made to defray any expenses other than those incurred for tuition, fees, or room rent.

6. Interest at the rate of six per cent annually shall be charged for all loans, and the interest must be paid annually.

The University encourages borrowers to take advantage of its incentive plan. This plan enables them to realize a substantial saving through rebates which are given for repayment of long term loans prior to their maturity date.

7. Applications for loans should be made to the Loan Committee, Office of the Secretary, Duke University. A formal application for loan assistance may be made only on forms furnished in the Secretary's Office during the first week of each semester. The granting or withholding of a loan is a matter entirely within the discretion of the loan committee. A student is expected to use all other possible means of securing financial assistance before applying for aid from the Loan Fund.



The loan funds available to undergraduates are listed in the *Bulletin of Undergraduate Instruction*.

### *Student Employment*

Student employment offices are maintained to serve students who need part-time jobs. There are many opportunities both on the campus and in the city of Durham, and a considerable number of students each year help defray their college expenses by working.

The student employment offices maintain a list of current available jobs. They also keep a permanent record of the work activities of the self-help students and are prepared thereby to write, in the senior year of these students, recommendations for the Appointments Office and prospective employers.

Students may make application for part-time employment only after they have completed an application for admission and notification of acceptance has been given. The job application should be by letter prior to the reporting date for entrance, and a complete detailed job application form must be completed at the time of arrival at Duke University.

Those students in Trinity College and the College of Engineering in need of such employment may apply to Mr. J. M. Dozier, 205 Administration Building, West Campus. Students in the Woman's College should apply to the Assistant Dean of Residence, 108 East Duke Building, East Campus.

### *Living<sup>1</sup> Accommodations for Men*

Craven, Crowell, and Kilgo Quadrangles on the West Campus are reserved for undergraduate men. Kilgo is assigned to freshmen. The three quadrangles contain thirty-one houses, each designated by a letter of the alphabet. Rooms are single, double, or arranged in suites of two rooms for four students. Each occupant of a double room is charged \$62.50 per semester; the occupant of a single room, \$87.50 per semester.

Rooms may be reserved only for applicants who have been officially accepted by the University. A deposit of \$25.00 is required for reservation. This deposit is deducted from the room rental charge at the time of registration for the semester; it is not refunded unless application for the refund is made sixty days prior to the registration date of the semester.

A resident student in order to retain his room for the succeeding semester must make application, accompanied by a reservation deposit of \$25.00. All rooms which have not been reserved on or before an

announced date will be considered vacant for the succeeding semester and will be reserved in the order in which applications are made.

Rooms are rented for no shorter period than one semester or, in the case of a medical student, one quarter, unless by special arrangement with the Housing Bureau. A period of occupancy other than a semester or quarter and without special arrangement will be charged at a minimum rate of \$1.00 each day.

The exchange of rooms may be arranged at the Housing Bureau within fifteen days after the official opening of the semester or quarter of the school term. Thereafter a charge of \$2.00 will be made. Persons exchanging rooms without the approval of the Housing Bureau will be subject to charges for both rooms.

The authorities of the University do not assume responsibility for the persons selected as roommates. Each student is urged to select the roommate when the room is reserved.

Beds and mattresses (39" x 74"), tables, chairs, dressers, mirrors, and window shades are furnished by the University. The student supplies linens, blankets, pillows, and rugs.

Duke University is particularly eager that its students shall have the best dormitory life to be found in any institution. It has endeavored to provide buildings and equipment commensurate with this ideal. The institution asks and believes that in return each student will respond by arranging his personal belongings in an orderly manner and by caring for the buildings and furniture as he would do in the home of a friend. The following regulations are offered as a guide and a reminder that care is desired.

1. The student will be held responsible for any damage to the room or furnishings during the rental period, and will pay for all damages caused by his neglect, misuse or abuse of any part of the University property. Inspections will be made throughout the college year to observe the condition of the rooms and to advise students concerning the care of rooms, if necessary.

2. Maids will prepare the rooms daily except Sunday, the service beginning promptly at 8:00 A.M. and ceasing at 1:00 P.M., thereby giving the student complete use of his room during the afternoon.

3. University furniture or furnishings must not be removed from the room in which they have been placed by the University.

4. Electric wiring, door locks, window screens, steam or water lines should not be changed or added, since the University supervises and makes such changes as are necessary and advisable.

5. Pictures, pennants, and clippings should be hung from the picture moulding and not tacked or pasted on walls or woodwork.

6. All trunks and heavy luggage will be stored in the trunk rooms. Janitors will remove the trunks from the hallways to the storage rooms when they are unpacked.

7. The exchange of rooms or keys should be arranged at the office. Any exchanges made otherwise will subject the participant to charges for both rooms.

8. The use or possession of intoxicating liquors, wines, or beer, and gambling in any manner in any of the buildings or on the grounds of Duke University are forbidden.

9. Animals shall not be kept in the dormitories.

10. Women are permitted in the dormitories only when accompanied by the University Hostess.

11. The use of dormitory rooms as a sales office or storeroom, or the solicitation for sales or gifts within the buildings or on the grounds is prohibited except by appointees of the University.

### *Living Accommodations for Women*

Undergraduate women are required to live in the residence houses of the Woman's College unless they are living with parents or close relatives in the city. In the case of a mature student the dean may, under special circumstances, make an exception. There are eight residence houses: Alspaugh, Aycock, Bassett, Brown, Giles, Jarvis, Pegram, and Southgate. All rooms in Jarvis and Southgate are double; in the other houses a few single rooms are available and, with the exception of Aycock, a limited number of suites consisting of a double room and one or two single rooms. A counselor, who is a member of the dean's staff, lives in each dormitory. It is her function to advise students and to assist the student House Council in the administration of the house. Each occupant of a double room is charged \$62.50 per semester; the occupant of a single room, \$87.50 per semester.

Room reservations are made with the Dean of Residence. A deposit of \$25.00 is required for reservation. This deposit is deducted from the room rental charge at the time of registration for the semester; it is not refunded unless application for the refund is made sixty days prior to the official opening of the semester. A new student should pay the deposit as soon as she is accepted by the Committee on Admissions. If she fails to do so within ten days, her admission is cancelled. As an applicant may not reserve a room until she is accepted officially, she is requested not to send the reservation deposit before she receives notice of her admission. In the spring resident students reserve rooms for the next fall semester in accordance with a plan announced by the Dean of Residence. New students, as far as possible, are given their choice of the remaining rooms.

Rooms are rented for no shorter period than one semester, unless by special arrangement with the Dean of Residence. A period of occupancy other than a semester or a quarter and without special arrangement will be charged at a minimum of \$1.00 each day.

After a student has engaged a room, she is not permitted to move to another without the consent of the Dean of Residence. A student leaving one room and occupying another without permission may be charged for both rooms for the entire semester. No student is allowed to rent or sublet the room she has engaged to another occupant.

A new student who wishes a double room but has made no arrangement for a roommate will be assigned a roommate by the College. After a student has been a resident for one semester, she is responsible for obtaining and keeping a roommate. If a student occupying a double room does not obtain a roommate in the time required by the Dean of Residence—approximately two weeks after the beginning of the semester—she may be required to pay the rental consideration for the entire room.

Rooms contain only the principal articles of furniture. The student supplies her own linens, blankets, bedspreads, curtains, and study lamp. She may, if she wishes, provide additional articles such as scatter-rugs and small tables or bookcases, but she may not have large rugs or overstuffed furniture.

### *Dining Service*

The dining facilities on the West Campus include three cafeterias with multiple-choice menus, and the Oak Room where full meals and *a la carte* items are served. The cost for the academic year ranges from \$325.00 to \$450.00, depending on the tastes of the individual. On the East Campus dining halls are located in the Union and in Southgate. Resident women may not board elsewhere than at these halls. The charge for board is \$175.00 per semester, payable at the time of registration.

It is hoped that present rates may be maintained. Charges, however, are necessarily dependent on costs of labor, foods, and materials, and some adjustment may be necessary.

Due to the large number of those served in the dining halls, it is not possible to arrange special diets for individual students. Special diet for the sick is served in the infirmary.

# Registration and Academic Regulations



**O**RIENTATION PROGRAM: All candidates for admission to the freshman class and all other students not in residence the preceding semester are expected to participate in the activities of Orientation Week. The program includes general ability, achievement, and placement tests, orientation lectures, physical examinations, social events, special religious services, registration, and enrollment.

The University considers the planning of a course of study to be of primary importance. A specially trained corps of advisers, therefore, is made available for consultation. The tests enable the counsellor to plan a program adapted to the ability, achievements, and goals of the individual student. New students who miss the whole or a part of the Orientation Program place themselves at a serious disadvantage at the very outset of their college career.

**MATRICULATION AND REGISTRATION:** Students in residence are required to submit to the appropriate dean, not later than the date of the spring registration, cards showing their selection of courses for the following year. An advance deposit of \$25.00 is required before the card may be submitted. These cards, approved by the dean, are filed for permanent record in the dean's office. Students who do not select their courses for the following year at the time appointed must pay a fee of \$5.00 to the Treasurer of the University before their course cards may be approved for the fall. Students whose course cards have been approved in the spring may matriculate by mail during the summer. The same regulations, with the exception of the advance deposit, apply to registration for the spring semester.

Students who register in either semester at a date later than that prescribed in the calendar of this Bulletin must pay to the Treasurer a fee of \$5.00. They are counted as absent in the work they have missed in the courses to which they are admitted, and these absences carry the same penalty as do other absences from the course. Changes in courses for reasons not arising within the University require a payment of \$1.00 for each change made. No course may be elected later than two weeks after the opening of the semester, and no student may be admitted to any class without an enrollment card.



## *General Academic Regulations*

**QUANTITY CREDIT AND COURSE LOAD:** The term of credit used is the semester hour which signifies one recitation a week throughout the semester. Two or three hours of laboratory work are equivalent to one hour of class work. Two semesters of seventeen weeks each constitute the academic year. For the degree of Bachelor of Arts or Bachelor of Science, credit for 124 semester hours is required; for a degree in Engineering, 148 semester hours.

The normal load of an undergraduate student in the Colleges of Arts and Sciences is five academic courses and 14 to 17 semester hours. The maximum number permitted is 19 semester hours, exclusive of physical education. In the College of Engineering the normal load is six academic subjects of 18 semester hours, exclusive of physical education. No student is permitted to take less than 14 semester hours of work without special permission from the dean nor to take more than the normal load of work unless his average grade in the preceding semester is higher than C.

**QUALITY CREDIT:** The requirements for the degree are computed not only in semester hours but also in quality points. Quality points are earned by a student on the basis of his grades: for an A he receives three quality points for each semester hour; for a B, two quality points for each semester hour; for a C, one quality point for each semester hour; for a D, no quality points; for an F, a loss of one quality point for each semester hour. (In the College of Engineering no loss is incurred by a grade of F.) Credit for at least 124 quality points is required for the degree of Bachelor of Arts or Bachelor of Science, and at least 148 quality points for a degree in Engineering.

**CLASS STANDING:** In the Colleges of Arts and Sciences a student to rank as a sophomore must have to his credit at least 26 semester hours and 26 quality points; as a junior, at least 56 semester hours and 56 quality points; and as a senior, at least 92 semester hours and 92 quality points. In the College of Engineering he must have, respectively, at least 30 semester hours and 30 quality points; 68 semester hours and 68 quality points; and 106 semester hours and 106 quality points.

In the Colleges of Arts and Sciences no senior may take for graduation credit any course open primarily to freshmen; and no junior may take for graduation credit more than one course open primarily to freshmen. A list of these courses is published in the Bulletin under "Courses of Instruction."

A student of the senior class, irrespective of his average grade in preceding years, must, in order to be eligible for graduation, complete the work of his senior year with a minimum average grade of C.

A tentative list of all candidates for the Bachelor's degree is prepared under the supervision of the dean as early in the college year as possible. A copy is furnished to each department of instruction for information and reference, and a copy is posted on the official bulletin board of the University for the information of the students concerned.

**RESIDENCE REQUIREMENTS:** A minimum of 30 semester hours of senior-level work in the Colleges of Arts and Sciences and 36 in the College of Engineering must be earned in residence. Students who meet this requirement but who still lack 6 to 8 semester hours in final fulfillment of requirements may take this work in another institution of approved standing, provided the course is approved by the head of the department concerned and by the dean.

A student who completes in a summer session the work required by the University for the Bachelor's degree will be granted the degree at the end of the summer.

#### **GRADING, ATTENDANCE, REPORTS, DISMISSAL, AND EXAMINATIONS:**

**GRADING:** Grades are reported so as to indicate one of four things:

(1) *Passed.* A grade of A, B, C, or D indicates that a student has passed a course. The work of this group of students is graded according to the following system: A, exceptional; B, superior; C, medium; D, inferior.

(2) *Failed.* A grade of F indicates that the student has failed the course, and in order to receive credit for the course he must repeat the work in class.

(3) *Incomplete.* (a) A grade of I may be reported by the instructor if for any reason he is unable to report the final grade at the regular time. (b) Incomplete courses must be completed before the close of the succeeding semester; otherwise the I is recorded as F, and the course must be repeated in class if the student is to receive credit for it.

(4) *Absent from final examination.* (a) The grade X indicates that the student was absent from the regularly scheduled examination. (b) A student absent from examination, if the absence has been excused by the dean of the college, may receive an examination upon the payment of a fee of \$3.00 to the Treasurer of the University. The instructor concerned arranges for the examination in cases where absences are excused. (c) A student with an X grade who has not obtained a passing grade before the end of the semester following that in which the X was incurred is regarded as having failed in the course concerned and must repeat the work in class in order to receive credit. (d) If a student's absence from an examination is not excused by the dean of the college, his grade for the course concerned is recorded as F.

If a student drops a course without permission from the dean, the grade for that course is recorded as F. If he drops with permission a course in which he is failing at that time, the grade for that course is recorded as F unless, in the judgment of the dean, circumstances do not justify this penalty.

**ATTENDANCE:** Regular and punctual attendance in class work is expected of all students. Weekly reports of all absences from class are to be made by each instructor and filed in the dean's office. No instructor has the authority to excuse a student from class attendance, and it is his duty to report all absences and tardinesses. The first three tardies in a given course are counted as one absence, and each succeeding tardy is counted as one additional absence.

To provide for absences due to brief illness and other absences for necessary reasons, one absence per semester hour credit may be incurred in each course during each semester.

Absences due to continuous illness of at least four days' duration and authorized absences for representation of the University may be excused, provided foresight has been used in previous absences.

Sophomores, juniors, and seniors who, in a normal schedule make averages of B or above in the preceding semester will be allowed two absences per semester hour but will, in all other respects, be subject to the same regulations as other students.

All absences immediately before and after announced holidays are counted as double absences.

For each unexcused excessive or consecutive absence the student incurs the loss of quality points in proportion to the number of such absences taken: one quality point for the first absence, two for the second, and three for the third. When the third unexcused, excessive, or consecutive absence is incurred, the student is debarred from the course with the loss of six quality points.

When a student's course load is reduced, because of unexcused absences, to less than 12 semester hours, he is required to withdraw from the University.

**REPORTS:** Reports on class attendance and proficiency in academic work are sent to parents or guardians after the examinations at the end of each semester. In addition, reports on freshmen are mailed at each mid-semester period.

**DISMISSAL:** A student of the freshman class to remain in the University must pass at least 6 semester hours of work in his first semester and 18 semester hours in his first year. All other students must pass at least 9 semester hours each semester. A student who is ineligible to reenter in September is ineligible to enter the Summer Session.

**EXAMINATIONS:** Final examinations are held in all subjects in January and May.

DEFICIENCIES IN COMPOSITION: The following regulations have been adopted by the Faculty:

1. Any student who must take English 1 and whose score in the English placement test indicates that he is not yet ready for English 1 must earn a passing grade in English L before being permitted to enter English 1.

2. In the fall of his or her junior year every student of Trinity College and of the Woman's College must take an examination in English usage. The regulation does not apply to students of the College of Engineering, which has special course requirements in English composition in addition to English 1-2. Students with irregular schedules resulting from acceleration or transfer to Duke after the fall of their junior year should take the examination in the fall of the year most nearly approximating the fifth semester. Students who are proved deficient by this examination will be required satisfactorily to complete a special non-credit laboratory course in remedial English.

3. Whenever the work of a student in any course is unsatisfactory because of errors in English, the instructor may report the student to the dean, who will require him to enroll in remedial English until, in the opinion of the director of the Remedial Laboratory, the deficiency is removed.

4. All instructors are requested to advise their students each semester concerning this regulation.

## The Libraries



THE UNIVERSITY LIBRARIES, with more than 1,000,000 volumes and 1,250,000 manuscripts, provide exceptional resources and facilities for study and research by undergraduate and graduate students, and by visiting scholars. Between 30,000 and 40,000 volumes are added annually, and seventy foreign and domestic newspapers and 3,600 periodicals are received currently. A large collection of microfilms of rare books, newspapers, and periodicals is available.

A Chemistry library (15,000 volumes), Physics-Mathematics library (14,000), and Biology-Forestry library (42,000) are housed for convenience of use in the buildings of these departments. The libraries of the Schools of Divinity (50,000), Law (92,000), Medicine (50,000) and of the College of Engineering (15,000) are also shelved in the buildings of these schools, all on the West Campus.

The General Library, centrally located on the West Campus, has 650,000 volumes in all other fields. It is the principal working and research collection for students in the humanities and social sciences.



The collection has been developed with care to support the work of the undergraduate curriculum and the more specialized needs of graduate and post-doctoral research. Basic collections of source materials are supported by the important publications of criticism and discussion. There are large collections of general periodicals, of the publications of European Academies, and of public documents of state, federal, and foreign governments, and international organizations. The newspaper collection (about 13,000 volumes and 2,000 rolls of microfilm) is particularly strong in papers from the states of the Atlantic seaboard, both North and South, with extensive holdings of Ante-bellum and Civil War papers of North Carolina, South Carolina, and Virginia.

The manuscript collections, relating chiefly to the South Atlantic region with particular strength in the Confederate period, is most extensive in the field of history, but it contains important source material on all phases of social and economic life as well as politics. There are groups of manuscripts in American and British literature, with a notable Walt Whitman collection, and a number of important mediaeval manuscripts, chiefly lectionaries and copies of the New Testament. Among many special collections of note are the Guido Mazzoni library of Italian and comparative literature, the Lanson Collection of French literature, Goethe and Dante collections, collections on Brazil, Peru, Ecuador, and the Philippines, the Holl Church history library, eighteenth-century English poetry and prose, a Socialist collection, the Arents tobacco collection, the Thomas collection of books on Chinese history and culture, the George Washington Flowers Collection of manuscripts, books, newspapers, and pamphlets dealing with all phases of Southern history, and the Trent collection of Walt Whitman books and manuscripts.

The General Library building, which was modernized and enlarged in 1949, contains many special features which contribute to the preservation of materials and facilitate their use by students and research workers. The book stacks, manuscripts, and rare book storage and reading rooms are air-conditioned. Two hundred and fifty carrels, some completely enclosed, are available in the stacks as places of study. Graduate and advanced students are permitted free access to the stacks. On the ground floor are a newspaper reading room with a battery of microfilm reading machines and a microphotography laboratory with facilities for reproducing printed and other material. On the same floor are the manuscripts reading room and storage area. The first floor has periodical, graduate, and undergraduate reading rooms, the latter opening into an attractively furnished small library for recreational reading. In the north wing is the rare book reading room, with adjoining special collection rooms and storage stacks. The second floor houses the general reference and reading room, the circu-



lation department and Main Loan Desk, and the Public Card Catalog, a union catalog of books in all the University libraries. There is also a catalog of the library of the University of North Carolina at Chapel Hill, whose books are available through inter-library loan.

On the East Campus, the Woman's College Library, in its attractive Georgian building, contains nearly 85,000 volumes in an open stack collection, chiefly those most constantly needed in the undergraduate work of women students. A reference and general reading room, the Thomas Memorial Room, and the Booklovers' Room, with open shelves of books for general reading, provide comfortable and attractive space for reading and study.

A "Student's Guide to the General Library" and a brochure on "The Library of Duke University" which describes the building and collections in greater detail are available on request addressed to the Librarian of the University.

## Reserve Officers Training Corps



THROUGH the Naval and Air Force Reserve Officers Training program the University is cooperating with the Department of National Defense in the effort to provide a steady supply of well-educated officers for the active and reserve forces of the Nation.

### *The Naval Reserve*

Scholarships are awarded to candidates selected as a result of an annual nation-wide test and selection procedure. These men are designated as Regular NROTC Students and are appointed Midshipmen, USNR. The scholarship covers the cost of tuition, fees, and textbooks. NROTC Midshipmen receive retainer pay at the rate of \$600 per year. The Navy furnishes necessary uniforms and equipment.

Normally students will attend college for four years while in the NROTC. They may take any course leading to a baccalaureate or higher degree, except that Midshipmen entering after 1950 may not pursue courses leading to degrees in pre-medicine, pre-dentistry, pre-theology, medicine, dentistry, or theology. They must include in their courses of study 24 semester hours of Naval Science plus certain minimum requirements in mathematics, physics, and English. They will wear the uniform only when engaged in drills or other Naval Activities prescribed by the Professor of Naval Science and, except for the ordinary requirements of gentlemanly behavior, will be

subject to Naval discipline only at those times. They are required to make two summer cruises at sea and to attend one summer training period of amphibious and aviation indoctrination. Upon graduation Regular NROTC students must accept a commission as Ensign, USN, or Second Lieutenant, USMC, if offered, and will be ordered to active duty for a period of 15-24 months. After fifteen months' service those so desiring may request an additional year of active duty and apply for permanent retention in the services as career officers. Those who do not desire to remain as career officers must accept a commission in the Reserve of the appropriate service and remain in the Reserve at least until the sixth anniversary of their first commission. Reserve Officers are not called to active duty except during a declared emergency of war, unless at their own request.

A second type of officer candidate in the NROTC is the Contract NROTC Student. These candidates are selected from qualified students regularly enrolled in Duke University. They have the status of civilians who have entered into a mutual contract with the Navy. They do not receive the compensation or benefits paid the Regular NROTC Student, but are furnished uniforms, Naval Science textbooks and equipment; and a subsistence allowance (currently 90 cents per day) during the final two years of NROTC training. Contract students make one training cruise, during which they receive active duty pay. Contract students on graduation must accept a commission in the Naval or Marine Corps Reserve, but may, if they so desire and their services are required, request active duty and a commission in USN or USMC. If ordered to active duty they then are eligible for selection as career officers under the same provisions as graduating NROTC regulars.

Under the provisions of the Selective Service Act of 1948, Regular NROTC Students who serve a period of active duty as an integral part of their training under Public Law 729 are deferred from Selective Service. Contract students, by virtue of an agreement to accept a commission on graduation and to serve on active duty if required, are deferred from Selective Service. All NROTC Students are considered on *inactive* duty in the Naval Reserve while in college, and such service may *not* be counted for exemption or deferment should a student be separated from the program for any reason.

### *The Air Force Reserve*

The unit functions as a regular department of instruction known as the Department of Air Science. It selects and trains students who possess the requisite character, intelligence, desire, and sense of duty to become Air Force Officers.

For enrollment in the Basic Course (freshman and sophomore years) the student must: be a male citizen of the United States; be physically qualified under standards prescribed by the Air Force (due allowance will be made for defects which are correctible prior to the student's eligibility for appointment as a commissioned officer); be accepted by the institution as a regularly enrolled student; be not less than 14 years of age and not have reached 23 years of age at the time of enrollment; and successfully complete such general survey and screening tests as may be prescribed.

For enrollment in the Advanced Course (junior and senior years) the student must: have successfully completed the Basic Course or have had at least one year of honorable service in the Armed Forces of the United States; execute a written agreement with the government to complete the Advanced Course, contingent upon remaining in school, and to attend the Advanced Summer Camp at the time specified; not have reached 27 years of age at the time of initial enrollment in the Advanced Course; successfully complete such general survey and screening tests as may be prescribed; and be selected by the Professor of Air Science and Tactics and the appropriate authority of the institution.

All uniforms, texts, and training equipment required for the Air Science Course are furnished at government expense, and students are paid a total of approximately \$600.00 for the two years of the Advanced Course.

Upon graduation and completion of the Advanced Course, students will be offered commissions as Second Lieutenants in the Air Force Reserve. Outstanding students will be offered lifetime careers in the Regular Air Force. Flying training is available after graduation for those who desire it and are physically qualified.

Students in the Basic Course may be deferred from Selective Service upon satisfactory completion of one semester of Basic Air Science. Advanced students are eligible for deferment as soon as they are enrolled formally in the Advanced Course. When quotas for deferment are less than the number of eligible enrollees, selection for deferment is made by a board composed of representatives from the AFROTC and the University.

## The Bureau of Testing and Guidance



THE UNIVERSITY maintains a Bureau of Testing and Guidance in which is centralized the counseling and guidance program for students. It is responsible for the administration of various testing programs throughout the year. Included in the responsibilities of

the Bureau are admissions tests, placement tests, vocational series, other specialized programs including the Graduate Record Examination, the Navy College Aptitude Test, the Medical College Admissions Test, and specific testing programs requested by the schools and colleges within the University. The Bureau likewise maintains facilities for research projects in the field of guidance and testing and offers such services to schools and individuals outside the community as its facilities permit. Requests for further information should be addressed to The Director, Bureau of Testing and Guidance, Duke Station, Durham, North Carolina.

## Appointments Office



THE APPOINTMENTS OFFICE is a service agency designed to aid graduates in solving the problem of post-college employment. Its primary function is to serve as an intermediary between students and prospective employers. It acquaints students with possibilities in business and professional fields; it assembles comprehensive records on each registrant and makes these records available to appropriate representatives; and it arranges interviews with prospective employers. The data assembled for individual records include academic achievement, training, experience, extracurricular activities, honors, and potential ability as revealed by scores on mental, personality, and interest tests. On occasion additional information of a specialized nature is secured. Confidential letters of recommendation are incorporated in the file of each registrant. The Office initiates contacts for students or co-operates with students who make contacts through personal efforts or through various departments of the University. It aids the registrant in directing his search to a field appropriate to his aptitude, training, and interest.

There are two major divisions of the Office: the Commercial Division, which handles all matters involving contacts with business and professional areas not related to formal education; and (2) the Educational Division, which concerns itself with teaching and school administration positions at all levels. Students and alumni may register with either or both of these divisions.

The Office receives more calls for qualified personnel than it can supply from its registrants—in 1949-1950 it was able to satisfy less than one-third of the 2,700 requests made by prospective employers. It is to the mutual advantage of the students and the Office that a complete record of registrants be assembled by the fall of the senior year.



## The Summer Session



THE SUMMER SESSION at Duke University makes available to Duke undergraduate students and to undergraduates from other universities and colleges a notable program of instruction in many fields of knowledge both academic and professional.

Undergraduates in Duke University who desire to accelerate their programs may complete the work for a degree in three years by attending two and one-half summer sessions.

Undergraduates from other colleges and universities may enjoy the special advantages of summer instruction at Duke and transfer their earned credits to their own institutions.

The Summer Session of 1951 will include two six-week terms: Term I, June 12 to July 21; Term II, July 21 to August 31. By attending both terms it is possible for a student to earn as many as twelve semester hours of credit.

Instruction of interest to undergraduates will be offered in the summer of 1951 in the following departments and colleges: Aesthetics, Art and Music; Botany; Chemistry; Economics; Education; Nursing Education; Engineering; English; Forestry; French; Geology; German; Greek; Health and Physical Education; History; Latin and Roman Studies; Mathematics; Philosophy; Physics; Political Science; Psychology; Religion; Sociology; Spanish; and Zoology.

Distinctive features of Summer Session instruction are provided by the program in marine biology offered at the Duke Marine Laboratory, Beaufort, N. C., and by the School of Spanish Studies held in Southgate Hall on the campus of the Woman's College, Durham, N. C. The School of Spanish Studies (1951 will be its tenth session) offers unusual opportunities to students both undergraduate and graduate who seek proficiency in the active use of the language. Students and faculty live and board in the Residence (Southgate) and share in a Hispanic social program. Among the faculty are native professors and native student assistants. Everyone speaks Spanish. Courses are offered concurrently on the undergraduate and the senior-graduate level so that the student while acquiring oral facility in everyday living may also satisfy course requirements toward a degree.

While the basic purpose of the Summer Session is to serve the academic and the professional requirements of those who are interested in their own educational advancement, the University recognizes the need of, and provides for, a varied recreation program both athletic and social.

Undergraduates of Duke University both men and women who plan to attend the Summer Session should enroll with the Dean of their own college in Duke University. Undergraduates in other universities or colleges who seek transfer credits should apply directly to the Director of the Summer Session, Duke University, Durham, N. C.



# Requirements for Degrees



DUKE UNIVERSITY offers, in Trinity College, the Woman's College, and the College of Engineering, courses of study which lead to the degrees of: Bachelor of Arts, Bachelor of Science, Bachelor of Science in Civil, Electrical, or Mechanical Engineering, and Bachelor of Science in Nursing Education.

## *Bachelor of Arts*

The requirements for the degree of Bachelor of Arts are based on the principle that the student will derive the maximum benefit from his college work if his program includes a broad distribution of studies among representative fields of culture, concentration within a special field, and some work of his own choice.

For graduation with the degree of Bachelor of Arts, the following course work must be completed in accordance with the academic regulations as stated in this Bulletin.

UNIFORM COURSE REQUIREMENTS	S.H.
English .....	6
Foreign Language .....	6-18
Natural Science .....	11
Religion .....	6
Social Science and History .....	12
Literature, Music, Art, and Philosophy .....	6
Physical Education .....	4
MAJOR AND RELATED WORK .....	42
ELECTIVES TO MAKE A TOTAL OF .....	124

These requirements are described in detail below. Descriptions of courses can be found under "Courses of Instruction, Trinity College and the Woman's College" in the *Bulletin of Undergraduate Instruction*.

**ENGLISH, 6 s.h.**—This requirement is met by the completion of English 1-2. Students who demonstrate proficiency in English usage may be allowed to substitute 55 or 56 for English 1.

**FOREIGN LANGUAGE, 6 to 18 s.h.**—This requirement is met by the completion of the third college year of a foreign language. The languages which meet this requirement are French, German, Greek, Latin, Spanish. The number of courses required depends on previous training and ability as shown on placement tests. Students presenting for entrance four units of Latin may, however, satisfy the language requirement by the completion of the third college year of Latin or by two years of Greek. In exceptional cases, on the recommendation of the language department concerned and with the approval of the Dean, a student who has completed the second college year of one language may satisfy the requirement by the completion of the first year of another language.

**NATURAL SCIENCE, 11 s.h.**—To satisfy this requirement a student must complete a laboratory course (8 s.h.) in one of the natural sciences (botany, chemistry, geology, physics, zoology), and one course of at least 3 semester hours selected from mathematics (except Mathematics 1), logic and scientific methodology (Philosophy 48, 104, and 242), or from the sciences listed above.

**RELIGION, 6 s.h.**—To meet this requirement 6 semester hours must be chosen from Religion 1, 2, 51, 52, 101, 103, 104, 114, 130, 132, 181, 182, 183, or Philosophy 99.

**SOCIAL SCIENCE AND HISTORY, 12 s.h.**—(a) Students who present for entrance two acceptable units of history can satisfy this requirement by 12 semester hours chosen from History 1-2, or 51-52, Economics 51-52, Education 84, 105, Political Science 61-62, Psychology 91-92, or Sociology 91-92. Six of the 12 semester hours must be taken in economics, history, political science, or sociology. (b) Students who do not present for entrance two acceptable units of history must take History 1-2, or 51-52, and 6 semester hours selected from the other social sciences named in (a).

**LITERATURE, MUSIC, ART, AND PHILOSOPHY, 6 s.h.**—This requirement can be satisfied by a total of 6 semester hours in courses in English or American literature, foreign literature courses numbered above 100, literature courses in translation, courses in aesthetics, art, music, or Philosophy 91, 93, or 94.

**PHYSICAL EDUCATION, 4 s.h.**—In Trinity College physical education is required during each of the first two years and is normally completed by the end of the sophomore year; in the Woman's College it is required during the first three years and is normally completed by the end of the junior year.

**MAJOR AND RELATED WORK, 42 s.h.**—Prior to registration in the spring of his sophomore year, each student is required to choose his major field and confer with his departmental adviser on the requirements for major and related work.

The major work consists of 18 to 24 semester hours in one department exclusive of courses open primarily to freshmen.\* The choice of courses must be approved by the major department. The related work must be taken in at least two other departments and is selected subject to the approval of the major department and the dean; it may not include more than one course of 6 or 8 semester hours open primarily to freshmen. Courses satisfying the uniform course requirements may also be counted toward the requirements in major and related work. Information on specific departmental requirements for major and related work can be found in the section "Courses of Instruction," and several programs of study designed as preparation for professions are given in the next section.

The total amount of work that a student may take in any one department toward the Bachelor of Arts degree is limited to a maximum of 36 semester hours. In the Department of Aesthetics, Art, and Music, and the Department of Philosophy, the Department of English, the Department of Economics and Business Administration, and the Department of Romance Languages, a total of 54 semester hours is permitted, provided a total of not more than 36 semester hours is taken in any one division of the department.

**ELECTIVES.**—In addition to the uniform courses required and major and related work, other courses must be completed to make a total of at least 124 semester hours, including 4 semester hours of physical education.

Students whose courses of study permit may elect a maximum of 18 semester hours in engineering, forestry, or medical science. The courses elected in these subjects must be approved by the major department and the dean of the college.

## CHOICE OF A MAJOR FIELD

The requirement of 42 semester hours in a major field is based pri-

\* Courses open primarily to freshmen are numbered from 1 to 49 and a list of them is given under "Courses of Instruction, Trinity College and the Woman's College."

marily on the belief that some advanced study in one subject, together with related work in allied subjects, is a valuable part of a general education. The selection of a major field usually depends on a student's cultural or vocational interests.

### GENERAL PROGRAM

The General Program is designed for the student whose primary interest is in one of the liberal arts subjects. The subjects in which major work is offered are: art, botany, chemistry, economics, education, English, French, geology, German, Greek, history, Latin, mathematics, music, philosophy, physics, political science, psychology, religion, sociology, Spanish, zoology.

### SPECIALIZED PROGRAMS

The student who has chosen a vocation may wish to include specialized training in his program. The following programs of study in preparation for various professions or professional schools are outlined for the guidance of the student.

**BUSINESS:** The student who plans to engage in some form of business may choose his major work in economics or he may take the following specified courses to satisfy the requirements for the major and related work.

Freshman Year: Economics 11 (recommended but not required), Mathematics 5 and 16.

Sophomore Year: Economics 51-52, Economics 57-58, Political Science 61-62.

Junior and Senior Years: Economics 138, Economics 143, Economics 144, Economics 153, Economics 171-172 or Economics 105 and 158, Economics 181-182, Economics 189. Three hours of the economics courses shown in Economics Major Section B.

In addition to the courses specified above, 9 semester hours from other courses in the Department of Economics and Business Administration must be elected.

A student planning to take the examination to qualify as a Certified Public Accountant may, with the permission of the Department of Economics, substitute courses in accounting (including Economics 184) for courses 11, 138, 144, 189, and for 3 semester hours of the electives in Section B (p. 113).

**RELIGIOUS WORK:** A student who plans to enter the ministry or other religious work should have a broad liberal arts training. He may major in religion or any other subject. It is suggested that the student include in his program as many as possible of the following courses.

Freshman Year: Religion 1-2, History 1-2.

Sophomore Year: Religion (6 s.h.), Economics 51-52 or Political Science 61-62, English Literature (6 s.h.).

Junior Year: Religion (6 s.h.), Psychology 91-92, English 151-152.

Senior Year: Religion (6 s.h.), Sociology (6 s.h.), Philosophy (6 s.h.).

**SOCIAL WORK:** The student who plans to pursue professional studies in preparation for social work (such as family welfare, child welfare, public welfare, probation and parole and similar forms of neighborhood and community work) should take his major work in sociology, with related work in other social sciences. The following courses should be included:

History 1-2, or 51-52.  
Economics 51-52.  
Political Science 61-62.  
Psychology 91-92.  
Philosophy (6 s.h.).

Zoology is recommended for the required course in Natural Science. Electives should be chosen mainly from history, economics, political science, education, sociology, philosophy, psychology, or religion.

**TEACHING:** The program for students who intend to teach is designed to prepare for positions both in the elementary school and in the high school. All prospective teachers, regardless of the type of school in which they expect to teach, (a) must take a sequence of four basic courses in the Department of Education, namely, Education 84, 88, 103, and 118; (b) should read carefully the certification requirements of the state in which they plan to teach and should arrange their programs with their departmental adviser accordingly; and (c) should begin early the required sequence of courses in education, taking Education 84 and/or 88 first, preferably in the first semester of the sophomore year.

**HIGH-SCHOOL TEACHING.** Students may meet certification requirements by qualifying in one teaching subject, but they are strongly advised to choose their electives to meet requirements in two teaching subjects. In any case their programs must include courses in education and in other subjects sufficient to satisfy the certification requirements of the state in which they will teach. Courses in materials and methods should be reserved for the senior year; and courses in observation and practice teaching may be taken *only* in the senior year.

**ELEMENTARY SCHOOL TEACHING.** Students preparing to teach in the elementary school must complete the following specific requirements: Education 101-102 and 142, History 91 or 92, and Political Science 63 or 61-62, Economics 115, Economics 109, or 118, or 120, Music 151, Physical Education 102, and Health Education 112. Education 101-102 (which includes observation and practice teaching) should be reserved for the senior year.

**PREPARATION FOR GRADUATE SCHOOL:** The student who plans to enter a graduate school of arts and sciences for advanced study should consult an adviser in the field of the proposed advanced study concerning suitable preparation. Most graduate schools have definite requirements in foreign languages for all students. Candidates for the

degree of Doctor of Philosophy are required to pass reading examinations, usually in German and French. In some cases other languages may be substituted. As soon as practicable, the student should ascertain the requirements of the particular graduate school he desires to enter.

**PREPARATION FOR LAW SCHOOL:** Students who plan to study law may select their major work in any field. The following courses are recommended:

Economics 51-52, 57-58.  
English 55-56.  
History 1-2 or 51-52, 105-106.  
Philosophy 48 and 91.  
Political Science 61-62.  
Sociology 91-92.

Special advisers are available for pre-legal students. The names of these advisers may be secured at the dean's office.

**PREPARATION FOR MEDICAL OR DENTAL SCHOOL:** Students planning to enter a medical or dental school should select the following foundation courses for the study of medicine:

Chemistry 1-2, 61, 151-152.  
English 55-56.  
Mathematics 5, 6.  
Physics 51-52.  
Zoology 1-2, 53.

Pre-medical and pre-dental students may take their major work in a single department, or they may satisfy the requirement for the major and related work by the completion of at least 13 semester hours chosen from the following courses in addition to the 54 semester hours of foundation courses above:

Botany 101 or Zoology 110.  
Chemistry 70.  
Mathematics 51, 52.  
Physics 125, 126.  
Psychology, 2 courses from 109, 111, 119, 130, 212.  
Zoology 92, and 152 or 271.

Science courses numbered above 100 may be substituted for these with the approval of an adviser for the pre-medical group and the Dean. Students who plan to include psychology in their 13 hours should complete Psychology 91-92 in their sophomore or junior years. When the major work is in science, electives in social sciences or humanities are recommended. It is advisable to choose German or French as the foreign language. Each pre-medical student should ascertain the requirements and recommended courses of the medical school that he expects to attend.

Special advisers are available for pre-medical and pre-dental students. The names of these advisers may be secured at the dean's office.



# Bachelor of Science

For graduation with the degree of Bachelor of Science, the following course work must be completed in accordance with the academic regulations as stated in this Bulletin.

UNIFORM COURSE REQUIREMENTS	S.H.
English .....	6
French and German (second college year) .....	12-24
Mathematics .....	6
Natural Science .....	8
Economics, History, or Political Science .....	6
Religion .....	6
Restricted Elective .....	6
Physical Education .....	4
MAJOR AND RELATED WORK .....	48
ELECTIVES TO MAKE A TOTAL OF .....	124

These requirements are described below. Descriptions of courses can be found under "Courses of Instruction, Trinity College and the Woman's College" in the *Bulletin of Undergraduate Instruction*.

ENGLISH, 6 s.h.—This requirement is met by the completion of English 1 and 2. Students who demonstrate proficiency in English usage may be allowed to substitute English 55 or 56 for English 1.

FRENCH AND GERMAN.—Bachelor of Science candidates must complete at least the second college year, or equivalent as determined by examination, of both French and German.

MATHEMATICS, 6 s.h.—This requirement may be met by completion of Mathematics 5 and 6.

NATURAL SCIENCE, 8 s.h.—This requirement can be satisfied by courses in one of the natural sciences, namely, botany, chemistry, geology, physics, and zoology. The courses must include laboratory work, and may not be counted as part of the major or related work.

ECONOMICS, HISTORY, OR POLITICAL SCIENCE, 6 s.h.—A student who does not present for entrance two acceptable units of history (exclusive of other social work) must take a course in history; otherwise, he has his choice of economics, history, or political science. The courses that will satisfy this requirement are listed under "Courses of Instruction."

RELIGION, 6 s.h.—To meet this requirement 6 semester hours must be chosen from Religion 1, 2, 51, 52, 101, 103, 104, 114, 130, 132, 181, 182, 183, or Philosophy 99.

RESTRICTED ELECTIVE, 6 s.h.—To meet this requirement 6 semester hours in addition to other uniform course requirements must be selected from aesthetics, art, economics, education, English, foreign language, history, music, philosophy, political science, religion, and sociology.

MAJOR AND RELATED WORK, 48 s.h.—Major and related work consists of 48 semester hours in the Natural Sciences. This work must be selected from the departments of botany, chemistry, geology, mathematics, physics, psychology, and zoology. The major work consists of not less than 24 semester hours in one department, the choice of courses being subject to the approval of the department. The major work does not include courses primarily open to freshmen. The related work is taken in at least two other departments and is selected subject to the approval of the major department. It may not include more than one course primarily open to freshmen. A minimum of 14 semester hours of related work is required, 8 hours of which must be in laboratory science. Further information concerning the requirements for the major and related work in the various departments will be found under "Courses of Instruction."

**ELECTIVES.**—In addition to the above, the student must elect sufficient courses to complete, with an average grade of "C," the 124 semester hours necessary for graduation.

Students whose courses of study permit may elect a maximum of 18 semester hours in engineering, forestry, or medical science. The courses elected in these subjects must be approved by the major department and the dean of the college.

The total amount of work that a student may take in any one department toward the Bachelor of Science degree is limited to a maximum of 40 semester hours.

On or before the date announced for the spring registration, every sophomore in this group should select his major department in the Natural Sciences and arrange, under the guidance of an adviser in the major department, his program of studies for the following year. He should obtain the adviser's written approval of all courses selected in the division before submitting his program to the dean for final action. In like manner, each upperclassman will recheck the courses in his division of concentration each year with a representative of his major department.

### *Bachelor of Science in Civil, Electrical, or Mechanical Engineering*

The studies for degrees in Engineering, designed for students who are preparing for civil, electrical, or mechanical engineering as a profession, lead to the following degrees: B.S. in C.E., B.S. in E.E., and B.S. in M.E. All curricula of the College of Engineering are fully accredited by the Engineers' Council for Professional Development.

#### GROUPS OF STUDIES FOR THE DEGREE OF BACHELOR OF SCIENCE IN CIVIL, ELECTRICAL, OR MECHANICAL ENGINEERING

See the *Bulletin of the College of Engineering* for courses substituted by Air ROTC and Naval ROTC students in the following curricula.

##### *Uniform Freshman Year*

FIRST SEMESTER				SECOND SEMESTER			
			S.H.				S.H.
Math	5	College Algebra	3	Math	50	Analytic Geometry	3
Math	6	Trigonometry	3	Math	51	Calculus I	3
Chem	1	Chemistry	4	Chem	2	Chemistry	4
Engl	1	English	3	Engl	2	English	3
Hist	E1	History	3	Hist	E2	History	3
G.E.	1	Drawing	2	G.E.	2	Descriptive Geometry	2
		Physical Education	1			Physical Education	1
			<hr/>				<hr/>
			19				19

# GROUP ONE

## CIVIL ENGINEERING

### *Sophomore Year*

FIRST SEMESTER			SECOND SEMESTER		
		S.H.			S.H.
Math 52	Calculus II ..	3	Math 53	Calculus III .....	3
Phys 51	Physics .....	5	Phys 52	Physics .....	5
Econ 51	Economics .....	3	Econ 52	Economics .....	3
G.E. 57	Statics .....	3	G.E. 107	Strength of Materials ...	3
C.E. 61	Surveying .....	4	C.E. 62	Surveying .....	4
	Physical Education .....	1		Physical Education .....	1
		19			19

### *Junior Year*

Engl 93	Advanced Composition ...	3	Engl 151	Public Speaking .....	3
G.E. 58	Dynamics .....	3	G.E. 128	Hydraulics .....	3
C.E. 131	Structures .....	5	C.E. 132	Structures .....	5
C.E. 113	Route Surveying .....	3	C.E. 118	Materials .....	3
E.E. 123	Electric Circuits .....	4	E.E. 124	Electric Machinery .....	4
		18			18

### *Senior Year*

C.E. 123	Water Supply .....	4	C.E. 124	Water Purification .....	3
C.E. 135	Soils .....	3	C.E. 116	Highways .....	3
C.E. 133	Reinforced Concrete ....	4	C.E. 140	Indeterminate Structures ..	3
M.E. 103	Heat Power .....	3	C.E. 144	Projects .....	2
M.E. 115	Mech. Eng. Laboratory ...	1	M.E. 104	Heat Power .....	3
	Elective (Non-Technical)..	3	M.E. 116	Mech. Eng. Laboratory ..	1
		18			18

# GROUP TWO

## ELECTRICAL ENGINEERING

### *Sophomore Year*

FIRST SEMESTER			SECOND SEMESTER		
		S.H.			S.H.
Math 52	Calculus II .....	3	Math 53	Calculus III .....	3
Phys 51	Physics .....	5	Phys 52	Physics .....	5
Econ 51	Economics .....	3	Econ 52	Economics .....	3
G.E. 57	Statics .....	3	M.E. 52	Kinetics—Mechanism .....	4
E.E. 51	Survey—Electrical Engineering .....	1	E.E. 52	Fields .....	3
Engl 93	Advanced Composition ...	3		Physical Education .....	1
	Physical Education .....	1			19
		19			

*Junior Year*

E.E. 101	Circuits .....	3	E.E. 102	Circuits .....	3
E.E. 107	Circuits Laboratory .....	1	E.E. 108	Circuits Laboratory .....	1
E.E. 105	Measurements .....	4	E.E. 106	Electronics .....	4
Math 131	Differential Equations ...	3	E.E. 148	D-C Machinery .....	3
M.E. 103	Heat Power .....	3	M.E. 104	Heat Power .....	3
M.E. 115	Mech. Eng. Laboratory ..	1	M.E. 116	Mech. Eng. Laboratory ...	1
G.E. 128	Hydraulics .....	3	Engl 151	Public Speaking .....	3
		<hr/>			<hr/>
		18			18

*Senior Year*

E.E. 257	A-C Machinery .....	3	E.E. 258	A-C Machinery .....	3
E.E. 163	Machinery Laboratory ...	1	E.E. 164	Machinery Laboratory ...	1
E.E. 261	Communications .....	4	E.E. 262	Communications .....	4
E.E. 165	Seminar .....	1	E.E. 166	Seminar .....	1
E.E. 159	Transmission .....	3	G.E. 107	Strength of Materials ....	3
E.E.	Elective .....	3	G.E. 109	Materials Laboratory .....	1
	Elective (Non-Technical) ..	3	E.E.	Elective .....	2
		<hr/>			<hr/>
		18			Elective (Non-Technical) .. 3
					<hr/>
					18

## GROUP THREE

## MECHANICAL ENGINEERING

*Sophomore Year*

FIRST SEMESTER			SECOND SEMESTER		
		S.H.			S.H.
Math 52	Calculus II .....	3	Math 53	Calculus III .....	3
Phys 51	Physics .....	5	Phys 52	Physics .....	5
Econ 51	Economics .....	3	Econ 52	Economics .....	3
G.E. 57	Statics .....	3	M.E. 52	Kinetics-Mechanism .....	4
M.E. 55	Steam Engineering .....	2	Engl 93	Advanced Composition ...	3
M.E. 51	Constructive Processes ...	3		Physical Education .....	1
	Physical Education .....	1			<hr/>
		<hr/>			19
		20			

*Junior Year*

M.E. 101	Thermodynamics .....	3	M.E. 102	Thermodynamics .....	3
M.E. 113	Mech. Eng. Laboratory ...	1	M.E. 114	Mech. Eng. Laboratory ..	2
M.E. 105	Fluid Mechanics .....	3	M.E. 108	Aeronautics .....	3
G.E. 107	Strength of Materials ....	3	M.E. 106	Heat Transfer .....	3
G.E. 109	Materials Laboratory ....	1	M.E. 150	Machine Design .....	3
E.E. 123	Electric Circuits .....	4	E.E. 124	Electric Machinery .....	4
Engl 151	Public Speaking .....	3			<hr/>
		<hr/>			18
		18			

*Senior Year*

M.E. 151	Machine Design .....	4	M.E. 158	Industrial Engineering ...	3
M.E. 155	Internal Combustion Engines .....	3	M.E. 162	Power Plants .....	3
M.E. 153	Heating—Air Conditioning	3	M.E. 154	Refrigeration .....	3
M.E. 159	Mech. Eng. Laboratory ...	2	M.E. 160	Mech. Eng. Laboratory ...	2
M.E.	Engineering Elective .....	3	M.E.	Engineering Elective .....	3
	Elective (Non-Technical) ..	3			<hr/>
		<hr/>			17
		18			

## *Bachelor of Science in Nursing Education*

The requirements for the degree of Bachelor of Science in Nursing Education are designed to prepare qualified graduate nurses for administrative, teaching, and supervisory positions in schools of nursing and in nursing service agencies.

To be eligible for admission to Duke University as a candidate for this degree a student must meet the following requirements:

1. Graduation from an approved secondary school with at least fifteen acceptable units of credit. (See specific requirements for admission to Trinity College and the Woman's College.)
2. Graduation from an approved school of nursing which provides satisfactory preparation in medical, surgical, pediatric, and obstetric nursing, as a minimum.
3. Satisfactory scores on specified tests.
4. Supervisory ratings from three individuals, preferably former teachers and supervisors with whom the individual has had fairly recent contact.

Credit for 120 semester hours (exclusive of physical education) on which an average grade of at least C is made is required for the degree of Bachelor of Science in Nursing Education. The work of the final year must be taken in residence at Duke University. The program of studies leading to this degree must include:

	S.H.
1. MINIMUM GENERAL EDUCATION REQUIREMENTS .....	38-50
May be taken at Duke University or at any accredited college or university.	
English 1-2 .....	6
Natural science .....	8
History, economics, or political science .....	6
Sociology .....	3-6
Psychology .....	3-6
Electives .....	12-18
Literature, art, music, religion, ethics, language are suggested.	
2. BASIC NURSING PROGRAM .....	maximum 40
May be taken at the Duke School of Nursing or at any approved school of nursing. The amount of credit which is granted for the nursing school program is determined on an individual basis.	
3. COURSES IN EDUCATION AND NURSING EDUCATION .....	20
88 Psychological Foundations of Modern Education .....	3
84N Social Foundations of Nursing Education .....	3
101N The Curriculum of the School of Nursing .....	3
115N-116N Nursing Education: Principles and Practices .....	8
117 Community Nursing Service—Seminar in Field Trips of Community Agencies .....	3
4. FIELD OF CONCENTRATION .....	15
Fifteen semester hours in one field, such as chemistry, physics, psychology, sociology, zoology, or in a clinical area and related subjects. No freshman work may be included in these 15 semester hours.	
5. PROFESSIONAL EXPERIENCE	
One year of experience as a graduate nurse is required before the degree is awarded.	



## *Academic-Professional Courses*

The provision whereby a senior may elect the work of the first year in a professional school of the University shall apply solely to eligible students in Trinity College or the Woman's College. The privilege of completing a combined course for the degree is conditioned upon admission to the professional school at the close of the junior year. A student thus admitted registers as a senior in the College and as a first-year student in the professional school.

### ACADEMIC-FORESTRY COMBINATION

A student who has completed with an average grade of C or higher the program of study given below may, with the approval of the dean of the College, transfer to the School of Forestry and be eligible for the degree of Bachelor of Science from Duke University upon the satisfactory completion of one year's work. It is understood that this provision shall apply solely to eligible undergraduates who have completed three years in residence in Duke University. The professional degree of Master of Forestry may be obtained on the satisfactory completion of an additional year in the School of Forestry.

The program of studies in preparation for admission to the School of Forestry is divided into four parts: (1) a group of studies required of all students; (2) courses required in a selected division of concentration; (3) additional elective courses sufficient to make a total of at least 92 semester hours of credit; and (4) summer field work in surveying and forest mensuration as described below.

The studies required of all students, of which the first four, together with 6 semester hours of a language, should ordinarily be taken in the freshman year, are as follows:

	S.H.
Botany 1-2 .....	8
Chemistry 1-2 .....	8
English 1-2 .....	6
Engineering Drawing 1-2 .....	4
Modern Foreign Language* .....	12-18
Mathematics 5, 6 .....	6
Physics 1-2 .....	8
Economics 51-52 .....	6
Geology 51 .....	4

At the end of the freshman year each student shall select a division of concentration. One of the following programs of concentration is recommended:

Botany. Botany 51, 151, 156, one additional course in Botany and Zoology 1.

Chemistry. Chemistry 61, 70, and 151-152; and Botany 151.

Economics. Economics 60, two additional semester courses in economics, and Political Science 61-62.

\* The requirement is the same as for the Degree of Bachelor of Science, except that Spanish may be substituted for French.

A student who does not select one of the above programs must complete the work of the junior year in his major and related fields.

Summer field work is required of all students in the School of Forestry. This program of 13 weeks, preferably to be taken upon completion of the junior year, includes Civil Engineering S110 (Plane Surveying), 4 s.h.; Forestry S150 (Forest Surveying), 5 s.h.; and Forestry S151 (Forest Mensuration), 4 s.h.

Completion of the first three years of work toward the Bachelor of Science degree does not insure admission to the Duke University School of Forestry, nor impose any restriction whatever upon its freedom in selecting students for admission.

Students wishing information concerning admission to the School of Forestry are invited to consult with the dean of that School.

### ACADEMIC-LAW COMBINATION

A student who has completed with an average grade of C or higher, 96 semester hours of undergraduate work, including the uniform course requirements for the degree of Bachelor of Arts and the work of the junior year in his major and related fields, may, with the approval of the dean of the College, transfer to the Duke University School of Law and be eligible for the degree of Bachelor of Arts from Duke University upon the satisfactory completion therein of the work of the first year.

It is understood that this provision shall apply solely to eligible undergraduates who have completed three years in residence in Duke University, and that not less than the full first-year's work of the Law School will be acceptable for credit towards the bachelor degree.

No single discipline or program of study can be described as the best preparation for the study of law. There are various methods of approach to legal study. Students differ with respect to the undergraduate studies by which they profit most in preparing themselves for law school.

Completion of the undergraduate work necessary to qualify for the Academic-Law Combination does not insure admission to the Duke University School of Law, nor impose any restriction whatever upon its freedom in selecting students for admission.

The first-year program of the Law School will include in 1951-52 the following courses:

	Fall Semester S.H.	Spring Semester S.H.
Chattel Transactions .....	2	2
Contracts .....	3	3
Estates in Land .....	—	3
Research and Writing .....	1	1
Torts (including some Procedure) .....	2	3

Legislation .....	3	—
Business Associations I (Agency, Partnership, Introduction to Corporations) .....	—	2
Criminal Law .....	3	—
	14	14

Students wishing further information are invited to consult with the Dean of the School of Law.

ACADEMIC-NURSING COMBINATION

A student who graduated from the Duke University School of Nursing in September, 1947, or thereafter, with an average grade of C or better, may, upon recommendation of the Dean of the School of Nursing, apply for admission to the Woman's College of Duke University. If accepted, she may obtain the degree of Bachelor of Arts or Bachelor of Science by fulfilling the requirements of either degree.

Forty semester hours of credit toward the 120 semester hours (exclusive of physical education) required for the Bachelor's degree are allowed for the three-year nursing program. At least 30 semester hours, of which 24 semester hours must be in courses numbered 100 or above, must be taken in residence in the Woman's College. An average grade of C or better is required for all work.

The program of studies leading to the degree of Bachelor of Arts must include:

	S.H.
1. UNIFORM COURSE REQUIREMENTS .....	47-59
English 1-2 .....	6
Language (completion of the third college year) .....	6-18
Natural Science .....	11
Religion .....	6
Social Science and History .....	12
Literature, Music, Art, and Philosophy .....	6
2. BASIC NURSING PROGRAM .....	40
3. FIELD OF CONCENTRATION .....	12
At least 12 semester hours in one department other than nursing in courses not primarily open to freshmen .....	12
4. ELECTIVES .....	9-21

To be eligible for the degree of Bachelor of Science, a student must complete the course of study outlined under the Requirements for the Degree of Bachelor of Science.

# Courses of Instruction

## Trinity College and the Woman's College



NOTE: Courses primarily for freshmen are numbered from 1 to 49; those primarily for sophomores are numbered from 50 to 99; those primarily for juniors and seniors from 100 to 199; those primarily for seniors and graduates from 200 to 299. The amount of credit for each course is given in semester hours following the description of the course.

Odd-numbered courses are offered in the fall semester, and even-numbered courses are offered in the spring semester. Double numbers indicate that the course is a year-course and must normally be continued throughout the year if credit is received. A student must secure written permission from the instructor in order to receive credit for either semester of a year-course.

This is a condensed description of courses. For a full description see the *Bulletin of Undergraduate Instruction*.

### COURSES OPEN PRIMARILY TO FRESHMEN

Air Science 1-2	Latin 1-2, 3, 4
Art 1-2	Mathematics 1, 5, 6, 15, 16
Botany 1-2	Music 1-2, 11-12, 47-48
Chemistry 1-2	Naval Science 101, 102
Economics 11, 12	Philosophy 48, 49
Education 1	Physical Education 1, 2
English 1-2	Physics 1-2
French 1-2, 3-4	Political Science 21, 22
German 1-2, 3-4	Religion 1-2
Greek 15	Spanish 1-2, 3-4
Health Education 41	Zoology 1-2
History 1-2	

### AESTHETICS, ART, AND MUSIC

PROFESSOR KATHARINE E. GILBERT, CHAIRMAN; ASSISTANT PROFESSOR SUNDERLAND, DIRECTOR OF UNDERGRADUATE STUDIES IN ART; ASSOCIATE PROFESSOR HALL, SUPERVISOR OF FRESHMAN INSTRUCTION IN ART; ASSISTANT PROFESSOR JULIA W. MUELLER, DIRECTOR OF UNDERGRADUATE STUDIES IN MUSIC; ASSISTANT PROFESSOR BONE, SUPERVISOR OF FRESHMAN INSTRUCTION IN MUSIC; ASSISTANT PROFESSORS JENKINS, KLENZ, MARKMAN, EARL MUELLER, SAVILLE, AND WITHERS; MR. GRAY

#### AESTHETICS

FOR SENIORS AND GRADUATES

201-202. THE PHILOSOPHY OF ART.—6 s.h.	PROFESSOR GILBERT
213-214. HISTORY OF AESTHETICS.—6 s.h.	PROFESSOR GILBERT

#### ART

1-2. HISTORY OF ART.—6 s.h.	ASSOCIATE PROFESSOR HALL
51-52. HISTORY OF ART: ART AND CULTURE IN THE WESTERN WORLD.—6 s.h.	ASSISTANT PROFESSOR MARKMAN

- 53-54. THEORY OF REPRESENTATION AND DESIGN.—6 s.h.  
ASSISTANT PROFESSOR E. MUELLER
- 55-56. ART LABORATORY.—Prerequisite: Art 53-54, or consent of the instructor. 4 s.h.  
ASSISTANT PROFESSOR E. MUELLER
- 61-62. ARCHITECTURAL HISTORY AND DESIGN.—6 s.h.  
ASSOCIATE PROFESSOR HALL
94. AMERICAN ART.—3 s.h.  
ASSISTANT PROFESSOR E. MUELLER
101. MEDIAEVAL ARCHITECTURE.—3 s.h. ASSISTANT PROFESSOR SUNDERLAND
102. MEDIAEVAL PAINTING AND SCULPTURE.—3 s.h.  
ASSISTANT PROFESSOR SUNDERLAND
103. RENAISSANCE AND BAROQUE ARCHITECTURE: ITALY.—3 s.h.  
ASSOCIATE PROFESSOR HALL
104. RENAISSANCE AND BAROQUE ARCHITECTURE: SPAIN AND THE NORTH.—3 s.h.  
ASSOCIATE PROFESSOR HALL
105. EUROPEAN ARCHITECTURE SINCE 1700.—3 s.h.  
ASSOCIATE PROFESSOR HALL
106. ARCHITECTURE OF THE AMERICAS.—3 s.h.  
ASSOCIATE PROFESSOR HALL
110. ENGLISH ARCHITECTURE.—3 s.h. ASSISTANT PROFESSOR HALL
123. RENAISSANCE PAINTING: ITALY.—3 s.h.  
ASSISTANT PROFESSOR SUNDERLAND
124. BAROQUE PAINTING: ITALY.—3 s.h. ASSISTANT PROFESSOR JENKINS
125. RENAISSANCE PAINTING: THE NORTH.—3 s.h.  
ASSISTANT PROFESSOR SUNDERLAND
126. BAROQUE PAINTING: THE NORTH.—3 s.h.  
ASSISTANT PROFESSOR SUNDERLAND
130. PAINTING SINCE 1700.—3 s.h. ASSISTANT PROFESSOR SUNDERLAND
131. CONTEMPORARY ART.—3 s.h. ASSISTANT PROFESSOR E. MUELLER
150. SURVEY OF PAINTING.—3 s.h. ASSISTANT PROFESSOR JENKINS
- 157-158. ADVANCED LABORATORY IN ART.—Prerequisite: Art 55-56. 4 s.h.  
ASSISTANT PROFESSOR E. MUELLER
215. RELIGIOUS ART OF THE ANCIENT NEAR EAST.—3 s.h.  
ASSISTANT PROFESSOR MARKMAN
216. RELIGIOUS ART OF THE CLASSICAL WORLD.—3 s.h.  
ASSISTANT PROFESSOR MARKMAN
217. AEGEAN ART.—3 s.h. ASSISTANT PROFESSOR MARKMAN
218. EARLY GREEK ART.—3 s.h. ASSISTANT PROFESSOR MARKMAN

## DEPARTMENTAL MAJOR IN ART

*Prerequisite:* Art 1-2 or 51-52 or 61-62.

*Major Requirements:* Art 53-54, and 18 additional semester hours in the Department.

## MUSIC

Courses in music are offered both for the general student who wishes to acquire knowledge of music as literature and on a more technical level for those prepared to major in the field. The courses marked \* are open to general students without prerequisites.



## THEORY

- \*11-12. FUNDAMENTALS OF MUSIC (THEORY I).—8 s.h. STAFF
- \*61-62. FUNDAMENTALS OF MUSIC (THEORY I).—8 s.h. STAFF
- 73-74. HARMONY AND SMALLER FORMS (THEORY II).—Prerequisite: Music 11-12 or 61-62. 8 s.h. ASSISTANT PROFESSOR KLENZ
- 117-118. ADVANCED HARMONY AND COUNTERPOINT (THEORY III).—Prerequisites: Music 11-12 or 61-62, and 73-74. 4 s.h. ASSISTANT PROFESSOR KLENZ
121. CONDUCTING.—Prerequisites: Music 11-12 or 61-62, and 73, or consent of the instructor. 3 s.h. ASSISTANT PROFESSOR BONE
122. ORCHESTRATION.—Prerequisites: Music 11-12 or 61-62, and 73, or consent of the instructor. 3 s.h. ASSISTANT PROFESSOR BONE

## HISTORY AND CRITICISM

- \*1-2. INTRODUCTION TO MUSIC.—6 s.h. ASSISTANT PROFESSOR WITHERS
- \*51-52. INTRODUCTION TO MUSIC.—6 s.h. ASSISTANT PROFESSOR J. MUELLER
65. PIANO ENSEMBLE.—Prerequisites: Music 11-12 or 61-62, or consent of the instructor. 1 s.h. ASSISTANT PROFESSOR WITHERS
66. MIXED ENSEMBLE.—1 s.h. STAFF
- 95-96. HISTORY OF MUSIC.—Prerequisites: Music 1-2, or 11-12, or consent of instructor. 6 s.h. ASSISTANT PROFESSOR BONE
- \*133. ORCHESTRAL LITERATURE.—3 s.h. ASSISTANT PROFESSOR BONE
- \*134. CHORAL LITERATURE.—3 s.h. ASSISTANT PROFESSOR SAVILLE
135. PIANO LITERATURE.—Prerequisites: Music 1-2 or 51-52, or consent of the instructor. 3 s.h. ASSISTANT PROFESSOR WITHERS
137. CHAMBER MUSIC.—Prerequisites: Music 1-2 or 51-52, or 11-12 or 61-62, or consent of the instructor. 3 s.h. ASSISTANT PROFESSOR J. MUELLER
138. CONTEMPORARY MUSIC.—Prerequisites: Music 1-2 or 51-52, or 11-12, or 61-62, or consent of the instructor. 3 s.h. ASSISTANT PROFESSOR KLENZ
- 145-146. HISTORY OF MUSIC.—Prerequisites: Music 1-2, or 51-52, or 11-12, or consent of instructor. 6 s.h. ASSISTANT PROFESSOR SAVILLE
- \*164. MUSIC IN THE NINETEENTH CENTURY.—3 s.h. ASSISTANT PROFESSOR J. MUELLER
- \*165. OPERA.—3 s.h. ASSISTANT PROFESSOR SAVILLE
- 195-196. COLLEGIUM MUSICUM.—4 s.h. Laboratory may be taken separately for credit of 2 s.h. (E) ASSISTANT PROFESSOR KLENZ

## MUSIC EDUCATION

- 101-102. VOCAL METHODS.—Prerequisites: Music 11-12 or 61-62, or consent of instructor. 6 s.h. ASSISTANT PROFESSOR SAVILLE
- 103-104. INSTRUMENTAL METHODS.—Prerequisites: Music 11-12 or 61-62, or consent of the instructor. 6 s.h. ASSISTANT PROFESSOR BONE
106. PIANO METHODS AND MATERIALS.—Prerequisites: Music 11-12 or 61-62, or consent of the instructor. 3 s.h. ASSISTANT PROFESSOR WITHERS
- 151-152. MUSIC FOR EDUCATION MAJORS.—6 s.h. ASSISTANT PROFESSOR SAVILLE

## APPLIED MUSIC

Members of the Department offer instruction in the following media: A. Piano; B. Strings; C. Woodwinds; D. Brass.

A student who plans to take Applied Music should consult the appropriate

faculty member as early as possible before registering for the course offered in his chosen medium at his class level. His proficiency before registration is tested by audition and rated as Grade I-VIII. Upon satisfactory completion of the course his proficiency is again rated, and his Grade recorded as a Roman numeral following the course number; e.g., a freshman who passes the first semester course in Piano with a proficiency rating of Grade VI is recorded as having completed Music 47A-VI, a senior who passes the first semester course in Violin with a proficiency rating of Grade II is recorded as having completed Music 197B-II, and so on. This is in addition to the customary letter-grades recorded for students in all courses.

47A-48A, 97A-98A, 147A-148A, 197A-198A. PIANO.—2 s.h.

ASSISTANT PROFESSORS SAVILLE AND WITHERS

47B-48B, 97B-98B, 147B-148B, 197B-198B. VIOLIN, VIOLA, CELLO.—2 s.h.

ASSISTANT PROFESSORS KLENZ AND J. MUELLER

47C-48C, 97C-98C, 147C-148C, 197C-198C. WOODWINDS.—2 s.h.

ASSISTANT PROFESSOR BONE, MR. GRAY

47D-48D, 97D-98D, 147D-148D, 197D-198D. BRASS.—2 s.h.

ASSISTANT PROFESSOR BONE, MR. GRAY

*Requirements and Credits:* One semester hour of credit is allowed for  $\frac{1}{2}$  hour of private instruction per week and a minimum of one hour of practice daily, under the particular conditions specified below, and in accordance with standard university practice in grading proficiency. For any number of semester hours of credit in Applied Music, an equal number of hours must be taken in Music Theory or Music History.

Majors in Music Theory must earn 6 semester hours credit in Applied Music. Credit may be reckoned from Grade I.

Majors in Music History and Criticism must earn 6 semester hours credit in Applied Music. Credit may be reckoned from Grade I.

Majors in Music Education must earn 7 semester hours credit in Applied Music as follows:

General (Choral) majors:

Major medium, reckoned from Grade III.—5 s.h.

Minor medium, reckoned from Grade I.—2 s.h.

Instrumental majors:

Major medium, reckoned from Grade III.—5 s.h.

Minor medium, reckoned from Grade I.—2 s.h.

Piano proficiency through Grade II.

Students other than Music Majors may receive not more than 8 semester hours credit for work in Applied Music. Credit may be reckoned from Grade I.

*Fees per Semester:* Fees for instruction in Applied Music include rental of practice facilities sufficient to meet the credit requirements. They are payable to the Treasurer's Office of Duke University at the beginning of each semester, as follows:

One  $\frac{1}{2}$  hour lesson per week for 15 weeks.....\$40.00

Either

One hour's daily use of cubicle with piano..... 15.00

Or

One hour's use daily of cubicle without piano..... 10.00

#### DEPARTMENTAL MAJOR IN MUSIC

*Prerequisite:* Music 11-12 or 61-62.

*Major Requirements:* Music 81-82, and 22 additional semester hours in the Department. The major student will select, in consultation with his departmental adviser, a sequence of Music courses emphasizing (a) theory, or (b) history and criticism, or (c) education, or (d) the use and understanding of a particular medium.

## DEPARTMENTAL ORGANIZATIONS

Students taking Applied Music are urged by the Department to participate in one or more of the following departmental organizations:

Duke University Symphony Orchestra  
Duke University Chamber Orchestra  
Duke University Concert Band  
Duke University Madrigal Singers

## AIR SCIENCE

PROFESSOR SWITZER, COLONEL, USAF; ASSOCIATE PROFESSOR RAMBEAU, LIEUTENANT COLONEL, USAF; ASSISTANT PROFESSORS MCBRYDE, MAJOR, USAF; RENKEN, CAPTAIN, USAF; AND CLARK, CAPTAIN, USAF

ELIGIBILITY REQUIREMENTS.—All physically qualified freshmen who are citizens of the United States and are enrolled in Trinity College or the College of Engineering are eligible to enroll in the Air Force ROTC. Veterans may be exempted from the freshman and sophomore courses (AS 1-2 or 11-12, AS 51-52 or 61-62).

AIR FORCE ROTC COURSES.—Trinity College students pursuing the program will specialize in general administration and supply. Students in the College of Engineering will specialize in Air Installations. The courses are established by the United States Air Force and are approved by the College as electives for all undergraduates. Field or laboratory instruction in leadership, drill and exercise of command is included as a part of all courses to indoctrinate the student in the fundamental principles of command.

## ADMINISTRATION AND LOGISTICS

AS 1-2. DEVELOPMENT OF ARMED FORCES AND THE CONCEPTS OF AIR POWER. 4 s.h. STAFF

AS 51-52. APPLIED AIR POWER AND ELEMENTARY AIR FORCE ADMINISTRATION.—Prerequisite: AS 1-2 or equivalent. 4 s.h. STAFF

AS 101-102. AIR FORCE ADMINISTRATION AND LOGISTICS.—Prerequisites: AS 1-2 and 51-52 or equivalent. 8 s.h. ASSISTANT PROFESSOR MCBRYDE

AS 201-202. ADVANCED AIR FORCE ADMINISTRATION.—Prerequisites: AS 1-2 and 51-52 or equivalent, and AS 101-102. 8 s.h.

ASSISTANT PROFESSOR MCBRYDE

## AIR INSTALLATIONS

AS 11-12. DEVELOPMENT OF THE ARMED FORCES, CONCEPTS OF AIR POWER, AND MAINTENANCE OF INSTALLATIONS.—6 s.h. STAFF

AS 61-62. APPLIED AIR POWER AND ELEMENTS OF AIR INSTALLATIONS.—Prerequisites: AS 11-12 or equivalent. 6 s.h. STAFF

AS 111-112. AIR INSTALLATIONS AND MAINTENANCE ENGINEERING.—Prerequisites: AS 11-12 and 61-62 or equivalent. 8 s.h. ASSISTANT PROFESSOR RENKEN

AS 211-212. ADVANCED AIR INSTALLATIONS.—Prerequisites: AS 11-12 and 61-62 or equivalent, and AS 111-112. 2 s.h. ASSISTANT PROFESSOR RENKEN

## BOTANY

PROFESSOR BLOMQUIST, CHAIRMAN; PROFESSOR OOSTING, DIRECTOR OF UNDERGRADUATE STUDIES; ASSOCIATE PROFESSOR ANDERSON, SUPERVISOR OF FRESHMAN INSTRUCTION;

PROFESSOR ADDOMS, SUPERVISOR OF FRESHMAN INSTRUCTION (WOMAN'S COLLEGE);

PROFESSORS HARRAR, KRAMER AND WOLF; ASSOCIATE PROFESSOR PERRY;

DRS. KEEVER AND WARREN; MR. BATSON; AND ASSISTANTS

1. GENERAL BOTANY.—4 s.h. STAFF

2. GENERAL BOTANY.—Prerequisite: Botany 1. 4 s.h. STAFF

51. CULTURE AND PROPAGATION OF PLANTS.—Prerequisite: one year of botany. 4 s.h. PROFESSOR ADDOMS

52. PLANT IDENTIFICATION.—Prerequisite: one year of botany. 4 s.h.  
PROFESSOR BLOMQUIST
55. MORPHOLOGY AND ANATOMY OF VASCULAR PLANTS.—Prerequisite: one year of botany. 4 s.h.  
PROFESSOR OOSTING
101. PRINCIPLES OF HEREDITY.—Prerequisite: one (high-school or college) course in biology, botany, or zoology. High-school or college algebra recommended. 3 or 4 s.h.  
ASSOCIATE PROFESSOR PERRY
103. GENERAL BACTERIOLOGY.—Prerequisite: one year of botany or zoology, or equivalent. 4 s.h.  
DR. WARREN
104. THE STRUCTURE AND IDENTIFICATION OF LOWER PLANTS.—Prerequisite: one year of botany. 4 s.h.  
ASSOCIATE PROFESSOR ANDERSON
151. INTRODUCTORY PLANT PHYSIOLOGY.—Prerequisite: Botany 1, 2 or equivalent; one year of chemistry recommended. 4 s.h.  
PROFESSOR KRAMER
156. PLANT ECOLOGY.—Prerequisites: Botany 1, 2 and 52, or equivalent. 4 s.h.  
PROFESSOR OOSTING
202. GENETICS.—Prerequisites: one year of botany or zoology, or equivalent, and college algebra. 4 s.h.  
ASSOCIATE PROFESSOR PERRY
203. PLANT CYTOLOGY.—Prerequisite: one year of botany. 4 s.h.  
ASSOCIATE PROFESSOR ANDERSON
204. ADVANCED PLANT ANATOMY.—Prerequisite: Botany 55 or equivalent. 4 s.h.  
PROFESSOR ADDOMS
216. BOTANICAL MICROTECHNIQUE.—Prerequisite: two semesters of botany. 4 s.h.  
ASSOCIATE PROFESSOR ANDERSON
221. STRUCTURE AND CLASSIFICATION OF FUNGI.—Prerequisite: two semesters of botany. 4 s.h.  
PROFESSOR WOLF
222. PHYSIOLOGY AND ECOLOGY OF FUNGI.—Prerequisite: Botany 221 or equivalent. 4 s.h.  
PROFESSOR WOLF
- 225-226. SPECIAL PROBLEMS.—Students with adequate training may do special work in the following fields:
- a. BACTERIOLOGY, MYCOLOGY, AND PLANT PATHOLOGY.  
DR. WARREN, PROFESSOR WOLF
  - b. CYTOLOGY.  
ASSOCIATE PROFESSOR ANDERSON
  - c. ECOLOGY.  
PROFESSOR OOSTING
  - d. GENETICS.  
ASSOCIATE PROFESSOR PERRY
  - e. MORPHOLOGY AND ANATOMY OF HIGHER GROUPS.  
PROFESSORS ADDOMS, HARRAR, AND OOSTING
  - f. MORPHOLOGY AND TAXONOMY OF LOWER GROUPS.  
PROFESSOR BLOMQUIST AND ASSOCIATE PROFESSOR ANDERSON
  - g. PHYSIOLOGY.  
PROFESSORS KRAMER AND ADDOMS
  - h. PLANT MICROCHEMISTRY.  
PROFESSOR ADDOMS
  - i. TAXONOMY OF HIGHER GROUPS.  
PROFESSOR BLOMQUIST
  - j. SENIOR SEMINAR.—1 s.h.  
STAFF
252. ADVANCED PLANT PHYSIOLOGY.—Prerequisite: Botany 151 or equivalent; organic chemistry recommended. 4 s.h.  
PROFESSOR KRAMER
255. ADVANCED TAXONOMY.—Prerequisite: two years of botany, including Botany 52 or equivalent. 4 s.h.  
PROFESSOR BLOMQUIST
256. FIELD ECOLOGY.—Prerequisites: Botany 1, 2, and 52 or equivalent. 4 s.h.  
PROFESSOR OOSTING

## FOREST BOTANY

224. FOREST PATHOLOGY.—Prerequisites: Botany 1, 2. 3 or 4 s.h.

PROFESSOR WOLF

253. DENDROLOGY.—Prerequisite: one year of botany. 3 s.h.

PROFESSOR HARRAR

Related courses which may be counted toward a major in botany. Zoology 110. Introduction to Genetics. 2 s.h.

ASSISTANT PROFESSOR ROBERTS

## DEPARTMENTAL MAJOR

*Prerequisites:* Botany 1 and 2.

*Major Requirements:* A minimum of 21 hours of work including courses 52, 55, and 104. The remaining hours may be selected from any other courses in the Department for which the student is eligible, subject to the approval of the Departmental Adviser. All majors are expected to register for Senior Seminar for one semester of their senior year.

## CHEMISTRY

PROFESSOR SAYLOR, EXECUTIVE OFFICER AND DIRECTOR OF UNDERGRADUATE STUDIES; ASSOCIATE PROFESSOR HILL, SUPERVISOR OF FRESHMAN INSTRUCTION; PROFESSORS BIGELOW, GROSS, HAUSER, HOBBS, LONDON AND VOSBURGH; ASSOCIATE PROFESSORS BRADSHIER AND BROWN; DRs. STROBEL AND WILDER; MESSRS. ALLENSON AND POWELL, AND ASSISTANTS

1-2. GENERAL INORGANIC CHEMISTRY.—8 s.h.

ASSOCIATE PROFESSOR HILL; ASSOCIATE PROFESSORS BRADSHIER AND BROWN; DRs. STROBEL AND WILDER; MR. ALLENSON AND MR. POWELL; AND ASSISTANTS

61. FUNDAMENTALS OF ANALYTICAL CHEMISTRY.—Prerequisites: Chemistry 1-2, and Mathematics 6 or equivalent. 4 s.h.

PROFESSORS SAYLOR AND VOSBURGH; DRs. STROBEL AND WILDER; MR. ALLENSON AND MR. POWELL; AND ASSISTANTS

70. QUANTITATIVE ANALYSIS.—Prerequisite: Chemistry 61. 4 s.h.

PROFESSORS SAYLOR AND VOSBURGH; DRs. STROBEL AND WILDER; MR. ALLENSON AND MR. POWELL; AND ASSISTANTS

131. ADVANCED QUANTITATIVE ANALYSIS.—Prerequisite: Chemistry 70. 3 s.h.

PROFESSORS VOSBURGH AND SAYLOR AND ASSISTANT

151-152. ORGANIC CHEMISTRY.—Prerequisite: Chemistry 61. Course 151 is prerequisite for 152. 8 s.h.

PROFESSORS BIGELOW AND HAUSER; ASSOCIATE PROFESSORS BRADSHIER AND BROWN; DR. WILDER; AND ASSISTANTS

206. ELEMENTS OF THEORETICAL CHEMISTRY.—Prerequisites: Chemistry 70, 151-152, Physics 51-52 or 1-2 and Mathematics, 6 s.h. With the permission of the Director of Graduate Studies, graduate students from other departments may offer other advanced science courses in place of some of these prerequisites. 4 s.h.

PROFESSORS SAYLOR AND HOBBS

215-216. ADVANCED INORGANIC CHEMISTRY.—Prerequisites: Chemistry 70, 151-152, and 261-262. 6 s.h.

PROFESSOR VOSBURGH AND ASSOCIATE PROFESSOR HILL

233. INSTRUMENTAL ANALYSIS.—Prerequisites: Chemistry 70 and one year of physics. 2 s.h.

PROFESSORS HOBBS, SAYLOR AND VOSBURGH

234. PHYSICO-CHEMICAL METHODS OF ANALYSIS.—Prerequisites: Chemistry 70 and either 261-262 or 206; either of the latter may be taken concurrently. 2 s.h.

PROFESSORS HOBBS, SAYLOR AND VOSBURGH

236. THEORY OF ANALYTICAL CHEMISTRY.—Prerequisites: Chemistry 70 and 261-262. 1 s.h.

PROFESSOR VOSBURGH



251. QUALITATIVE ORGANIC ANALYSIS.—Prerequisites: Chemistry 70 and 151-152. 3 s.h. PROFESSOR HAUSER AND ASSISTANTS

252. ADVANCED ORGANIC PREPARATIONS.—Prerequisites: Chemistry 70 and 151-152. 1 or 2 s.h. ASSOCIATE PROFESSOR BROWN AND PROFESSOR BIGELOW

253-254. ADVANCED ORGANIC CHEMISTRY.—Prerequisites: Chemistry 70 and 151-152. 4 s.h. PROFESSORS BIGELOW AND HAUSER

261-262. PHYSICAL CHEMISTRY.—Prerequisites: Chemistry 70, 151-152, Physics 51-52 or 1-2 and Mathematics 51-52 or equivalent. 6 s.h.

PROFESSORS HOBBS AND SAYLOR

271. INTRODUCTION TO RESEARCH.—1 s.h. ASSOCIATE PROFESSOR BROWN

275-276. RESEARCH.—3 or 6 s.h.

PROFESSORS BIGELOW, GROSS, HAUSER, HOBBS, LONDON, SAYLOR AND VOSBURGH; ASSOCIATE PROFESSORS BRADSHER, BROWN AND HILL

#### DEPARTMENTAL MAJOR

A. For the degree of A. B.

*Prerequisites:* Chemistry 1-2, Mathematics 6 s.h.

*Major Requirements:* Chemistry 61, 70, 151-152, and an additional 6 or 7 s.h., which may be satisfied by 261-262 or by 206 together with 2 or 3 s.h. selected from courses 131, 233, 234 and 251. The related work must include one year of Physics.

B. For the degree of B.S.

*Prerequisites:* Chemistry 1-2, Mathematics 6 s.h.

*Major Requirements:* Chemistry 61, 70, 131, 151-152, 234, 251, 261-262. The related work must include Mathematics 51-52 and one year of Physics.

### ECONOMICS AND BUSINESS ADMINISTRATION

PROFESSOR HOOVER, CHAIRMAN; PROFESSOR DE VYVER, DIRECTOR OF UNDERGRADUATE STUDIES; PROFESSORS BLACK, HUMPHREY, RATCHFORD, SIMMONS, SMITH, SPENGLER, AND VON BECKERATH; ASSOCIATE PROFESSORS HANNA, LONDON, LEMERT, MANN, AND SHIELDS; ASSISTANT PROFESSORS ASHBROOK, DEWEY, JOERG, MCKENZIE, AND SAVILLE; MESSRS. BRANDIS, DICKENS, EASTMAN, EMMA, HYLDBURG, MANSFIELD, AND WALTER

#### ECONOMICS

12. AMERICAN ECONOMIC INSTITUTIONS.—3 s.h. PROFESSOR SMITH

51-52. PRINCIPLES OF ECONOMICS.—6 s.h. STAFF

103. TRANSPORTATION.—3 s.h. ASSOCIATE PROFESSOR LONDON

107. CONSERVATION.—3 s.h. ASSOCIATE PROFESSOR LEMERT

132. THE ECONOMIC HISTORY OF THE UNITED STATES.—3 s.h. PROFESSOR SMITH

138. BUSINESS STATISTICS.—Prerequisite: Mathematics 5 or the equivalent. 3 s.h. ASSOCIATE PROFESSOR HANNA

152. GLOBAL GEOGRAPHY.—3 s.h. ASSOCIATE PROFESSOR LEMERT

153. MONEY, CREDIT AND BANKING.—3 s.h. PROFESSOR SIMMONS; PROFESSOR RATCHFORD; ASSISTANT PROFESSORS ASHBROOK AND SAVILLE; MR. BRANDIS

155. LABOR PROBLEMS.—3 s.h. PROFESSOR DE VYVER

161. EUROPEAN ECONOMIC PROBLEMS.—3 s.h. PROFESSOR HUMPHREY

169. ECONOMICS OF CONSUMPTION.—3 s.h. ASSISTANT PROFESSOR SAVILLE

186. LATIN-AMERICAN ECONOMICS.—3 s.h. PROFESSOR SMITH

187. PUBLIC FINANCE.—3 s.h. PROFESSOR RATCHFORD

189. BUSINESS AND GOVERNMENT.—3 s.h.  
 PROFESSOR HUMPHREY; ASSISTANT PROFESSOR ASHBROOK
199. ECONOMIC ANALYSIS.—3 s.h. ASSISTANT PROFESSOR MCKENZIE
204. ADVANCED MONEY AND BANKING.—3 s.h. PROFESSOR SIMMONS
215. ECONOMIC SYSTEMS.—3 s.h. PROFESSOR HOOVER
216. ECONOMIC FUNCTIONS OF THE STATE.—Prerequisite: Economics 215  
 or its equivalent. 3 s.h. PROFESSOR HOOVER
217. POPULATION PROBLEMS AND RESOURCES.—3 s.h.  
 PROFESSOR SPENGLER
218. BUSINESS CYCLES.—3 s.h. PROFESSOR HUMPHREY
231. ECONOMIC HISTORY OF EUROPE.—3 s.h. PROFESSOR SMITH
233. STATE AND LOCAL FINANCE.—Prerequisite: Economics 187 or consent  
 of instructor. 3 s.h. PROFESSOR RATCHFORD
234. FEDERAL FINANCE.—Prerequisite: Economics 187 or consent of instructor.  
 3 s.h. PROFESSOR RATCHFORD
236. TAXATION AND GOVERNMENT FINANCE.—3 s.h.  
 PROFESSOR RATCHFORD
- 237-238. STATISTICAL METHODS.—Prerequisite: Economics 138 or consent of  
 the instructor. 6 s.h. ASSOCIATE PROFESSOR HANNA
- 241-242. VALUE AND DISTRIBUTION.—6 s.h. PROFESSOR SPENGLER
245. PROBLEMS OF MODERN INDUSTRIALISM.—3 s.h.  
 PROFESSOR VON BECKERATH
256. LABOR LEGISLATION.—Prerequisite: Economics 155, or with the consent  
 of the instructor. 3 s.h. PROFESSOR DE VYVER
260. SOCIAL INSURANCE.—3 s.h. PROFESSOR DE VYVER
265. INTERNATIONAL TRADE AND FINANCE.—3 s.h. MR. EASTMAN
268. COMPETITIVE VERSUS MONOPOLISTIC ENTERPRISE.—3 s.h.  
 PROFESSOR VON BECKERATH
280. ADVANCED ECONOMIC PROBLEMS.—3 s.h.

## BUSINESS ADMINISTRATION

## A. ACCOUNTANCY

- 57-58. PRINCIPLES OF ACCOUNTING.—6 s.h. STAFF
60. GENERAL ACCOUNTING.—3 s.h. PROFESSOR DE VYVER; MR. EMMA
- 171-172. ADVANCED ACCOUNTING.—6 s.h. ASSOCIATE PROFESSOR SHIELDS
- 173-174. AUDITING, THEORY AND PRACTICE.—Prerequisite: Economics 171-  
 172 and the permission of the department. 6 s.h. ASSOCIATE PROFESSOR MANN
- 175-176. C. P. A. REVIEW.—Prerequisite: Economics 171-172 and permission  
 of the department. 6 s.h. PROFESSOR BLACK
177. INCOME TAX ACCOUNTING.—Prerequisite: Economics 171-172 or per-  
 mission of the instructor. 3 s.h. ASSOCIATE PROFESSOR SHIELDS
178. ACCOUNTING SYSTEMS.—Prerequisite: Economics 171-172 or permission  
 of the instructor. 3 s.h. ASSOCIATE PROFESSOR SHIELDS
180. GOVERNMENT ACCOUNTING.—Prerequisite: Economics 57-58 and per-  
 mission of the instructor. 3 s.h. ASSOCIATE PROFESSOR SHIELDS
- 275-276. ADVANCED INDUSTRIAL ACCOUNTING AND MANAGEMENT.—  
 Prerequisite: Economics 171-172 and permission of the department. 6 s.h.  
 PROFESSOR BLACK

## B. COMMERCE AND INDUSTRY

11. ECONOMIC GEOGRAPHY.—3 s.h.  
ASSOCIATE PROFESSOR LEMERT; MR. MANSFIELD
105. INDUSTRIAL MANAGEMENT.—3 s.h.  
ASSOCIATE PROFESSOR LANDON; MR. WALTER
109. THE ECONOMIC GEOGRAPHY OF LATIN AMERICA.—3 s.h.  
ASSOCIATE PROFESSOR LEMERT
115. FUNDAMENTALS OF GEOGRAPHY.—3 s.h. ASSOCIATE PROFESSOR LEMERT
116. PRINCIPLES OF ECONOMIC GEOGRAPHY.—Prerequisite: Economics  
115. 3 s.h. ASSOCIATE PROFESSOR LEMERT
118. ECONOMIC GEOGRAPHY OF THE SOUTH.—3 s.h.  
ASSOCIATE PROFESSOR LEMERT
120. ECONOMIC GEOGRAPHY OF THE PACIFIC.—3 s.h.  
ASSOCIATE PROFESSOR LEMERT
143. CORPORATION FINANCE.—3 s.h.  
ASSISTANT PROFESSOR JOERG; MR. DICKENS
144. INVESTMENTS.—Prerequisites: Economics 57-58 or 60, and 143. 3 s.h.  
ASSISTANT PROFESSOR JOERG
158. INSURANCE.—3 s.h. ASSISTANT PROFESSOR SAVILLE
168. MARKETING.—3 s.h. ASSOCIATE PROFESSOR LANDON
- 181-182. BUSINESS LAW.—6 s.h. MR. HYLDBURG
184. COMMERCIAL LAW FOR ACCOUNTANTS.—3 s.h. PROFESSOR BLACK
188. PERSONNEL MANAGEMENT.—Prerequisite: Economics 155. 3 s.h.  
PROFESSOR DE VYVER

## DEPARTMENTAL MAJOR

A major in economics requires the following election of courses:

## A

Economics 51-52. Principles of Economics.  
Economics 60, or 57-58. Principles of Accounting.  
Economics 138. Business Statistics.  
Economics 153. Money, Credit and Banking.  
Mathematics 5.

## B

Eighteen semester hours in junior and senior courses in economics (not business administration) of which six semester hours are restricted to the following group of courses:

Economics 199. Economic Analysis.  
Economics 204. Monetary and Banking Theory.  
Economics 215. Economic Systems.  
Economics 217. Population Problems.  
Economics 218. Business Cycles.  
Economics 231. Economic History of Europe.  
Economics 234. Federal Finance.  
Economics 245. Modern Industrialism.  
Economics 256. Labor Legislation.  
Economics 265. International Trade.

Students majoring in Economics are restricted by the general Faculty Regulation which limits course work in Economics and Business Administration to 54 semester hours with not over 36 semester hours in either of the department's subdivisions Economics and Business Administration.

## EDUCATION

PROFESSOR CARR, ACTING CHAIRMAN; ASSOCIATE PROFESSOR EASLEY, DIRECTOR OF UNDERGRADUATE STUDIES; PROFESSORS CHILDS, NAHM AND PROCTOR; ASSOCIATE PROFESSORS BOLMEIER, RUDISILL, STUMPF AND WEITZ; ASSISTANT PROFESSORS INGLES, MASSEY, MOSER, AND SMITH; MR. SLAY; AND ASSISTANTS

## I. ORIENTATION IN STUDY AND STUDY HABITS.—3 s.h.

PROFESSOR PROCTOR AND ASSISTANTS

## 6. A LABORATORY COURSE IN READING.—(Non-credit.)

ASSOCIATE PROFESSOR RUDISILL

## 54. INTRODUCTORY COURSE IN HISTORY OF EDUCATION.—3 s.h.

[Not offered in 1951-52]

## 68. MENTAL HYGIENE OF THE SCHOOL CHILD.—3 s.h.

[Not offered in 1951-52]

ASSOCIATE PROFESSOR EASLEY

## 84. SOCIAL FOUNDATIONS OF EDUCATION.—3 s.h.

ASSOCIATE PROFESSOR STUMPF AND MR. SLAY

NOTE: Courses 84, 88, 103, and 118 constitute a sequence of 12 hours in Education required of all prospective teachers. Students who intend to teach in the elementary school should confer with Professor Carr, and students who intend to teach in the secondary school should confer with Professor Childs, in order to work this sequence into their schedules. See courses under Nursing Education for modified sequence of courses for students preparing to teach in schools of nursing.

## 88. EDUCATIONAL PSYCHOLOGY: LEARNING AND MEASUREMENT.—3 s.h.

ASSOCIATE PROFESSOR RUDISILL

See note following course 84.

## 101-102. ELEMENTARY EDUCATION: PRINCIPLES AND PRACTICE.—8 s.h.

PROFESSOR CARR AND ASSISTANTS

## A. INTEGRATED ART IN THE PUBLIC SCHOOL.

MRS. MASON

## B. INDUSTRIAL ART IN THE PUBLIC SCHOOL.

MRS. MASON

## 103. ORGANIZATION AND MANAGEMENT OF THE SCHOOL.—3 s.h.

See note following course 84.

ASSOCIATE PROFESSOR BOLMEIER AND ASSISTANT

## 105. INTRODUCTION TO EDUCATIONAL SOCIOLOGY.—3 s.h.

PROFESSOR CHILDS

## 115-116. SECONDARY EDUCATION: PRINCIPLES AND PRACTICE.—8 s.h.

PROFESSOR CHILDS AND ASSISTANTS

## 118. EDUCATIONAL PSYCHOLOGY: PSYCHOLOGICAL DEVELOPMENT.—

Prerequisite: three semester hours in psychology or educational psychology. 3 s.h.

See note following course 84.

ASSOCIATE PROFESSOR EASLEY

## 128. TESTS AND MEASUREMENTS IN PERSONNEL WORK.—3 s.h.

[Not offered in 1951-52]

## 142. CHILDREN'S LITERATURE.—3 s.h.

PROFESSOR CARR AND ASSOCIATE PROFESSOR RUDISILL

176. MATERIALS AND METHODS IN HIGH-SCHOOL SCIENCE.—Prerequisite: at least 18 hours of science in college. 3 s.h.

PROFESSOR KRAMER

203. PRINCIPLES OF SCHOOL ADMINISTRATION.—Prerequisite: six semester hours in education. 3 s.h.

ASSOCIATE PROFESSOR BOLMEIER

## 205. CURRICULUM PROBLEMS IN SECONDARY EDUCATION.—3 s.h.

[Not offered in 1951-52]

PROFESSOR CHILDS

206. SOCIOLOGICAL FOUNDATIONS OF THE SECONDARY SCHOOL SUBJECTS.—Prerequisite: general sociology or approved work in education, including course 105. 3 s.h.

PROFESSOR CHILDS

207. TECHNIQUE OF TEACHING.—3 s.h.  
[Not offered in 1951-52] PROFESSOR CARR
- 208A. MENTAL TESTS AND APPLICATIONS.—Prerequisite: course 258 or six semester hours of other work in educational psychology or psychology. 3 s.h.  
ASSOCIATE PROFESSOR EASLEY
- 208B. MENTAL TESTS AND APPLICATIONS.—2 s.h.  
ASSOCIATE PROFESSOR EASLEY
209. STATISTICAL METHODS APPLIED TO EDUCATION.—3 s.h.  
ASSOCIATE PROFESSOR EASLEY
212. PSYCHOLOGY OF THE ELEMENTARY SCHOOL SUBJECTS.—3 s.h.  
[Not offered in 1951-52] PROFESSOR CARR
213. PROBLEMS IN THE ORGANIZATION AND ADMINISTRATION OF THE ELEMENTARY SCHOOL.—3 s.h.  
PROFESSOR PROCTOR
214. HISTORY OF EDUCATION IN THE UNITED STATES.—3 s.h.  
[Not offered in 1951-52]
215. EDUCATIONAL AND VOCATIONAL GUIDANCE.—Prerequisite: 12 semester hours in the Department, including course 105 or course 206. 3 s.h.  
[Not offered in 1951-52] PROFESSOR CHILDS
216. PSYCHOLOGICAL PRINCIPLES OF SECONDARY EDUCATION.—3 s.h.  
PROFESSOR CHILDS
222. THE CURRICULUM AND MATERIALS OF THE ELEMENTARY GRADES.—3 s.h.  
[Not offered in 1951-52] PROFESSOR CARR
227. THE PSYCHOLOGY OF LEARNING: PROBLEMS.—3 s.h.  
[Not offered in 1951-52] ASSOCIATE PROFESSOR EASLEY
228. THE PSYCHOLOGY OF LEARNING: THEORETICAL AND EXPERIMENTAL.—Prerequisite: course 227 or its equivalent. 3 s.h.  
[Not offered in 1951-52] ASSOCIATE PROFESSOR EASLEY
232. SUPERVISION OF INSTRUCTION.—3 s.h.  
PROFESSOR CARR
233. ADMINISTRATIVE PUPIL-ACCOUNTING.—3 s.h.  
[Not offered in 1951-52] PROFESSOR PROCTOR
234. SECONDARY-SCHOOL ORGANIZATION AND ADMINISTRATION.—3 s.h.  
ASSOCIATE PROFESSOR BOLMEIER
237. THE PSYCHOLOGY AND TEACHING OF READING.—3 s.h.  
ASSOCIATE PROFESSOR RUDISILL
238. REMEDIAL READING—PRINCIPLES AND PRACTICE.—3 s.h.  
ASSOCIATE PROFESSOR RUDISILL
244. STUDIES IN THE HISTORICAL DEVELOPMENT OF PUBLIC SCHOOL ADMINISTRATION.—3 s.h.  
[Not offered in 1951-52]
247. INVESTIGATIONS IN ARITHMETIC.—3 s.h.  
[Not offered in 1951-52]
253. LEGAL PHASES OF SCHOOL ADMINISTRATION.—3 s.h.  
ASSOCIATE PROFESSOR BOLMEIER
255. GUIDANCE FUNCTIONS OF THE CLASSROOM TEACHER.—Prerequisites: twelve hours in either education, or psychology, or a combination of the two. 3 s.h.  
ASSOCIATE PROFESSOR WEITZ
258. EDUCATIONAL MEASUREMENTS.—Prerequisite: 12 semester hours in the Department, including a course in educational psychology. 3 s.h.
264. RECENT MOVEMENTS IN AMERICAN EDUCATION.—3 s.h.  
[Not offered in 1951-52]



## NURSING EDUCATION

Students preparing for administrative, teaching, or supervisory positions in schools of nursing must take, in addition to other courses, substantially the same basic program of work in Education as do prospective secondary school teachers, namely, courses 84, 88, 103, 115-116, and 118. Course 101N below is substituted for course 103 in this program. Courses 84N and 115N-116N are sections of courses 84 and 115-116, respectively, designed especially for nurses.

84N. SOCIAL FOUNDATIONS OF NURSING EDUCATION.—3 s.h.

ASSISTANT PROFESSOR INGLES

101N. THE CURRICULUM IN THE SCHOOL OF NURSING.—3 s.h.

ASSISTANT PROFESSORS SMITH AND INGLES

115N-116N. NURSING EDUCATION: PRINCIPLES AND PRACTICE.—8 s.h.

ASSISTANT PROFESSOR SMITH

[Not open to students who have had course 115-116.]

117N. COMMUNITY NURSING SERVICE.—3 s.h. ASSISTANT PROFESSOR MASSEY

120N. NURSING EDUCATION: PROBLEMS IN NURSING CARE.—3 s.h.

ASSISTANT PROFESSORS INGLES AND MOSER

124N. NURSING EDUCATION: TEACHING OF THE NURSING ARTS.—3 s.h.

STAFF

130N. PSYCHOSOMATIC NURSING.—4 s.h.

ASSISTANT PROFESSOR MOSER

131N-132N. PSYCHIATRY AND PSYCHIATRIC NURSING.—8 s.h.

ASSISTANT PROFESSOR MOSER

133N. SEMINAR IN PSYCHIATRIC NURSING.—3 s.h.

ASSISTANT PROFESSOR MOSER

134N-135N. ADVANCED MEDICAL AND SURGICAL NURSING.—8 s.h.

ASSISTANT PROFESSOR INGLES

136N. SEMINAR IN MEDICAL OR SURGICAL SPECIALTY.—3 s.h.

ASSISTANT PROFESSOR INGLES

192N. PRINCIPLES AND METHODS OF TEACHING IN SCHOOLS OF NURSING.—3 s.h.

ASSISTANT PROFESSOR SMITH

193N. WARD ADMINISTRATION AND TEACHING.—3 s.h.

ASSISTANT PROFESSOR INGLES

195N. PERSONNEL WORK IN SCHOOLS OF NURSING.—3 s.h.

ASSISTANT PROFESSOR SMITH

## DEPARTMENTAL MAJOR

A major in the Department of Education consists of 24 semester hours of work above the freshman year, not including any work listed as primarily for freshmen, and including at least 6 semester hours of courses limited to seniors or to seniors and graduates. Before graduation, majors in the Department must have credit for at least one course in educational psychology, and one course in history and philosophy of education, or in educational sociology. The remainder of their work may be elected from courses listed for sophomores, juniors, and seniors, provided at least 6 semester hours of the course work are taken from courses listed for seniors and graduates, and provided that not more than 6 semester hours may be of courses numbered below 100.

## MATERIALS AND METHODS COURSES

Certain courses concerned with materials and methods in teaching the various subjects in the public school curriculum are listed in the proper subject matter department. These courses are intended to give credit on teaching certificates and are recommended by the Department of Education for such credit.

## ENGLISH

PROFESSOR IRVING, CHAIRMAN; ASSOCIATE PROFESSOR BEVINGTON, DIRECTOR OF UNDERGRADUATE STUDIES; ASSOCIATE PROFESSOR BOWMAN, SUPERVISOR OF FRESHMAN INSTRUCTION; PROFESSORS BAUM, BOYCE, BRINKLEY, GILBERT, GOHDES, HUBBELL, AND LEARY; VISITING PROFESSOR FOERSTER; ASSOCIATE PROFESSORS BLACKBURN, MITCHELL, PATTON, SANDERS, AND WARD; ASSISTANT PROFESSORS BEVINGTON, HARWELL, JORDAN, POTEAT, REARDON, SCHWERMAN, SUGDEN, WETHERBY, WHITE, AND WILLIAMS; DRs. CHURCH, AND STONE; MESSRS. COOK, FRIEND, GUILDS, HUNTING, KNOX, MACINTOSH, MICHALAK, REECE, REES, SAWIN, AND WAGNER; MRS. HARDY

## L. ENGLISH FUNDAMENTALS.—3 s.h.

ASSISTANT PROFESSOR JORDAN; MESSRS. MACINTOSH, REES, AND WAGNER

## 1-2. ENGLISH COMPOSITION.—6 s.h.

ASSOCIATE PROFESSORS BEVINGTON, BOWMAN, PATTON, AND SANDERS; ASSISTANT PROFESSORS BEVINGTON, HARWELL, JORDAN, POTEAT, SUGDEN, WHITE, AND WILLIAMS; DRs. CHURCH, AND STONE; MESSRS. COOK, FRIEND, GUILDS, HUNTING, KNOX, MACINTOSH, REECE, REES, SAWIN, AND WAGNER

## 33. WRITING LABORATORY. ASSISTANT PROFESSORS HARWELL AND JORDAN

## 53. ENGLISH COMPOSITION.—3 s.h. ASSISTANT PROFESSOR JORDAN

## 65-66. ENGLISH COMPOSITION.—6 s.h. ASSOCIATE PROFESSOR SANDERS

E93. ADVANCED COMPOSITION FOR ENGINEERS.—3 s.h.  
ASSISTANT PROFESSOR HARWELL101-102. EXPOSITORY ENGLISH COMPOSITION.—6 s.h.  
ASSOCIATE PROFESSOR MITCHELL

## 103-104. ENGLISH COMPOSITION.—6 s.h. ASSOCIATE PROFESSOR BLACKBURN

## 107-108. JOURNALISM.—6 s.h. ASSISTANT PROFESSOR SUGDEN

## 133. VERSE-WRITING.—3 s.h.

[Not offered in 1951-52]

## SPEECH AND DRAMA

## 106. PLAYWRITING.—6 s.h. ASSISTANT PROFESSOR REARDON

## 118. PERSUASIVE SPEAKING.—Prerequisite: English 151 or consent of the instructor. 3 s.h. ASSISTANT PROFESSOR WETHERBY

## 119. HISTORY OF THE THEATRE.—3 s.h. ASSISTANT PROFESSOR REARDON

121-122. PLAY PRODUCTION.—6 s.h.  
ASSISTANT PROFESSOR REARDON AND MR. MICHALAK139. THE SPEAKING VOICE.—3 s.h.  
ASSISTANT PROFESSORS SCHWERMAN AND WETHERBY150. ORAL INTERPRETATION OF LITERATURE.—3 s.h.  
ASSISTANT PROFESSOR SCHWERMAN151. ESSENTIALS OF PUBLIC SPEAKING.—3 s.h.  
ASSISTANT PROFESSORS REARDON, SCHWERMAN, AND WETHERBY;  
MR. MICHALAK; MRS. HARDY152. ARGUMENTATION.—Prerequisite: English 151 or consent of the instructor.  
3 s.h. ASSISTANT PROFESSOR WETHERBY  
[Offered in the fall semester]

## 171-172. RADIO BROADCASTING.—6 s.h. ASSISTANT PROFESSOR WETHERBY

## ENGLISH AND AMERICAN LITERATURE AND LANGUAGE

- 55-56. REPRESENTATIVE WRITERS.—6 s.h.  
 PROFESSOR BOYCE; ASSOCIATE PROFESSORS BEVINGTON, BLACKBURN, BOWMAN,  
 PATTON, SANDERS, AND WARD; ASSISTANT PROFESSORS BEVINGTON, POTEAT,  
 AND SUGDEN; DRs. CHURCH AND STONE; MESSRS. HUNTING AND REES
- 111-112. EIGHTEENTH-CENTURY LITERATURE.—6 s.h. PROFESSOR BOYCE
117. MILTON.—3 s.h. PROFESSOR BRINKLEY
- 123-124. SHAKESPEARE.—6 s.h. ASSOCIATE PROFESSOR BOWMAN AND WARD;  
 ASSISTANT PROFESSOR WILLIAMS
- 125-126. ENGLISH LITERATURE, 1789-1832.—6 s.h.  
 ASSOCIATE PROFESSOR PATTON AND ASSISTANT PROFESSOR WHITE
- 129-130. ENGLISH NOVEL.—6 s.h. ASSOCIATE PROFESSOR MITCHELL
- 131-132. ENGLISH LITERATURE, 1832-1900.—6 s.h.  
 ASSOCIATE PROFESSORS BEVINGTON AND SANDERS
134. CONTEMPORARY POETRY.—3 s.h. ASSISTANT PROFESSOR BEVINGTON
- 137-138. AMERICAN LITERATURE.—6 s.h.  
 PROFESSORS HUBBELL, GOHDES, AND LEARY
142. MATERIALS AND METHODS OF TEACHING HIGH-SCHOOL ENGLISH.—3 s.h.  
 ASSISTANT PROFESSOR JORDAN
- 143-144. ENGLISH LITERATURE: ELIZABETHAN AND SEVENTEENTH CENTURY.—6 s.h.  
 ASSOCIATE PROFESSOR BLACKBURN
- 153-154. COMPARATIVE LITERATURE.—6 s.h. PROFESSOR IRVING
155. MODERN EUROPEAN DRAMA.—3 s.h. ASSISTANT PROFESSOR WHITE
156. MODERN BRITISH AND AMERICAN DRAMA.—3 s.h.  
 ASSISTANT PROFESSOR WHITE
158. CONTEMPORARY FICTION.—3 s.h. PROFESSOR LEARY
160. ENGLISH LITERARY BIOGRAPHY.—3 s.h. ASSOCIATE PROFESSOR SANDERS
- 161-162. MODERN ENGLISH AND ITS BACKGROUNDS.—6 s.h. MR. COOK
165. AMERICAN FICTION.—3 s.h. PROFESSOR LEARY
166. AMERICAN FICTION.—3 s.h. PROFESSOR LEARY

## FOR SENIORS AND GRADUATES

- 201-202. ANGLO-SAXON.—6 s.h. PROFESSOR BAUM
- 205-206. MIDDLE ENGLISH.—6 s.h. PROFESSOR BAUM
- 203-204. CHAUCER.—6 s.h. PROFESSOR BAUM  
 [Not offered in 1951-52]
- 215-216. ELIZABETHAN DRAMA.—6 s.h. PROFESSOR GILBERT
217. MILTON.—3 s.h. PROFESSOR GILBERT  
 [Offered in the second semester]
218. SPENSER.—3 s.h. PROFESSOR GILBERT  
 [Not offered in 1951-52]
- 219-220. THE EIGHTEENTH CENTURY.—6 s.h. PROFESSOR IRVING
- 221-222. ENGLISH LITERATURE OF THE EARLY NINETEENTH CENTURY.—6 s.h.  
 VISITING PROFESSOR FOERSTER
- 223-224. ENGLISH LITERATURE OF THE LATER NINETEENTH CENTURY.—6 s.h.  
 PROFESSOR BAUM  
 [Not offered in 1951-52]

227. LITERARY CRITICISM.—3 s.h. PROFESSOR GILBERT
- 229-230. AMERICAN LITERATURE, 1800-1870.—6 s.h.  
PROFESSORS HUBBELL AND LEARY
- 233-234. AMERICAN LITERATURE SINCE 1870.—6 s.h. PROFESSOR GOIHDES
235. HISTORY OF AMERICAN DRAMA.—3 s.h. PROFESSOR LEARY
237. ENGLISH DRAMA, 1642-1800.—3 s.h. ASSOCIATE PROFESSOR WARD  
[Not offered in 1951-52]
239. SHAKESPEARE.—3 s.h. PROFESSOR GILBERT
241. STUDIES IN DRYDEN.—3 s.h. ASSOCIATE PROFESSOR WARD  
[Not offered in 1951-52]
247. LITERATURE IN COLONIAL AMERICA.—3 s.h. PROFESSOR LEARY  
[Not offered in 1951-52]
248. LITERATURE IN AMERICA, 1775-1820.—3 s.h. PROFESSOR LEARY  
[Not offered in 1951-52]
- 251-252. ENGLISH LITERATURE IN THE SEVENTEENTH CENTURY.—  
6 s.h. ASSOCIATE PROFESSOR WARD
- 269-270. SOUTHERN LITERATURE.—6 s.h. PROFESSOR HUBBELL  
[269 only, the spring semester]

#### DEPARTMENTAL MAJOR

*Prerequisite:* English 1 and 2.

*Major Requirements:* Twenty-four semester hours in English including the following:

1. Six hours in English 55-56.
2. Six hours in one of five designated period courses (143-144, 111-112, 125-126, 131-132, 137-138).
3. Three hours in one of the major authors, Chaucer, Shakespeare, or Milton (203-204, 123, 124, 117).
4. Nine hours, distributed as follows:
  - (a) Three hours of English literature before 1800. Students who have chosen 143-144 or 111-112 for the period course may substitute any three-hour course approved by their adviser.
  - (b) Three hours of English literature after 1800. Students who have chosen 125-126 or 131-132 for the period course may substitute any three-hour course approved by their adviser.
  - (c) Three hours of American literature. Students who have chosen 137-138 for the period course may substitute any three-hour course approved by their adviser.

*Related work:* Eighteen semester hours, which may include appropriate courses in history, aesthetics, art, music, languages, literature in translation, philosophy, or courses in composition, dramatics, and speech. Related work must be taken in at least two departments.

*Electives:* Students may use 12 hours of their free electives for additional work in English and American literature. The maximum credit in such courses may not exceed 36 hours. A total of 54 semester hours' credit in the department is allowed. Students who are looking forward to graduate work should take as many of the period courses as possible. No more than five seniors may be admitted to any course on the 200 level.

#### FORESTRY

Students without a Bachelor's degree who are preparing for work in forestry as a profession should take the courses outlined under the Academic-Forestry Combination. However, with the consent of the instructor in charge, certain

forestry courses may be elected by students in other curricula provided they have had adequate preparation (see *Bulletin of the School of Forestry*).

Members of the sophomore, junior, and senior classes, whether or not registered in the Academic-Forestry Combination, may elect the following course:

52. PRINCIPLES OF FORESTRY.—2 s.h.

## GEOLOGY

PROFESSOR BERRY, CHAIRMAN, DIRECTOR OF UNDERGRADUATE STUDIES AND SUPERVISOR OF FRESHMAN INSTRUCTION; MESSRS. BUCKNER AND HERON

51. GENERAL GEOLOGY.—4 s.h. Mr. HERON AND STAFF

52. GENERAL GEOLOGY.—Prerequisite: Geology 51. 4 s.h.  
Mr. HERON AND STAFF

55. STRUCTURAL GEOLOGY.—Prerequisite: Geology 51, 52. 3 s.h.  
Mr. HERON

58. GEOMORPHOLOGY.—4 s.h. PROFESSOR BERRY

101-102. MINERALOGY.—Prerequisite: Chemistry 1-2 (can be taken concurrently). 8 s.h. PROFESSOR BERRY

151. ECONOMIC GEOLOGY.—Prerequisite: Geology 101-102. 4 s.h.  
Mr. HERON

152. INTRODUCTORY PALEONTOLOGY.—Prerequisites: Geology 51, 52, and Zoology 1. 4 s.h. PROFESSOR BERRY

164. INTRODUCTION TO GEOLOGIC MAPPING.—Prerequisites: Geology 51, 52, 55, 151. 3 s.h. Mr. HERON

## DEPARTMENTAL MAJOR

*Prerequisites:* None for Geology 51. Chemistry 1-2 for Geology 101-102; Zoology 1 for Geology 152.

*Major Requirements:* Geology 51, 52, 55, 101-102, 151, 152, 164. Geology 58 may be elected.

## GERMANIC LANGUAGES AND LITERATURE

PROFESSOR VOLLMER, CHAIRMAN; ASSISTANT PROFESSOR MAXWELL, DIRECTOR OF UNDERGRADUATE STUDIES; ASSOCIATE PROFESSOR WILSON, SUPERVISOR OF FRESHMAN INSTRUCTION; ASSOCIATE PROFESSOR SHEARS; MESSRS. HOFEN AND YATES

1-2. ELEMENTARY GERMAN.—6 s.h.  
ASSISTANT PROFESSOR MAXWELL AND STAFF

3-4. INTERMEDIATE GERMAN.—6 s.h.  
ASSOCIATE PROFESSOR WILSON AND STAFF

51-52. INTRODUCTION TO GERMAN LITERATURE.—6 s.h.  
PROFESSOR VOLLMER AND STAFF

107-108. SCIENTIFIC GERMAN.—6 s.h.  
ASSOCIATE PROFESSOR WILSON; AND ASSISTANT PROFESSOR MAXWELL

109-110. GERMAN PROSE FICTION.—6 s.h. ASSOCIATE PROFESSOR WILSON

111-112. INTRODUCTION TO THE CLASSIC DRAMA.—6 s.h.  
ASSOCIATE PROFESSOR WILSON

115-116. GERMAN DRAMA OF THE NINETEENTH CENTURY.—6 s.h.  
ASSOCIATE PROFESSOR WILSON

117-118. GERMAN CONVERSATION.—6 s.h.  
PROFESSOR VOLLMER; ASSOCIATE PROFESSOR SHEARS;  
AND ASSISTANT PROFESSOR MAXWELL



- 119-120. GERMAN LITERATURE IN ENGLISH TRANSLATION.—6 s.h.  
 PROFESSOR VOLLMER
- 121-122. SCHILLER.—6 s.h. ASSISTANT PROFESSOR MAXWELL
- 123-124. MODERN GERMAN SHORT STORY.—6 s.h.  
 ASSOCIATE PROFESSOR SHEARS
- 125-126. CONTEMPORARY GERMAN LITERATURE.—6 s.h.  
 ASSOCIATE PROFESSOR SHEARS
- 127-128. SURVEY OF MODERN GERMAN LITERATURE.—6 s.h.  
 PROFESSOR VOLLMER
- 131-132. INTRODUCTION TO GOETHE.—6 s.h. ASSISTANT PROFESSOR MAXWELL
- 201-202. GOETHE.—6 s.h.
- 203-204. EIGHTEENTH CENTURY.—6 s.h. PROFESSOR VOLLMER
- 205-206. MIDDLE HIGH GERMAN.—6 s.h. PROFESSOR VOLLMER
- 207-208. GERMAN ROMANTICISM.—6 s.h. PROFESSOR VOLLMER
- 209-210. KLEIST, GRILLPARZER, AND HEBBEL.—6 s.h.
- 211-212. HEINRICH HEINE AND YOUNG GERMANY.—6 s.h.  
 PROFESSOR VOLLMER
- 213-214. LITERATURE OF THE EMPIRE, 1871-1914.—6 s.h.  
 ASSOCIATE PROFESSOR SHEARS

#### DEPARTMENTAL MAJOR

1. *Prerequisites:* German 1-2 and 3-4.
2. *Major Requirements:* Twenty-four semester hours in the German Department. Twelve of these must be selected from the 200 courses. The remaining twelve may be selected from German 51-52 and any courses in the 100 group except 119-120.

#### GOVERNMENT

See courses listed under Political Science.

#### GREEK

- ASSISTANT PROFESSOR TRUESDALE, DIRECTOR OF UNDERGRADUATE STUDIES; ASSISTANT PROFESSOR ROSE, SUPERVISOR OF FRESHMAN INSTRUCTION; ASSISTANT PROFESSOR WAY
- 1-2. COURSE FOR BEGINNERS.—6 s.h. ASSISTANT PROFESSOR TRUESDALE
- 53-54. XENOPHON.—*Anabasis*, Books I-IV. 6 s.h. ASSISTANT PROFESSOR ROSE
- 105-106. HOMER.—6 s.h. ASSISTANT PROFESSOR TRUESDALE
- 107-108. EURIPIDES.—ARISTOPHANES.—6 s.h. STAFF
15. MYTHOLOGY.—3 s.h. ASSISTANT PROFESSORS TRUESDALE AND WAY
- 115-116. SIGHT READING IN GREEK.—4 s.h. ASSISTANT PROFESSOR TRUESDALE
- 117-118. GREEK PROSE COMPOSITION.—3 s.h. ASSISTANT PROFESSOR ROSE
- 121-122. GREEK LITERATURE IN ENGLISH TRANSLATION.—6 s.h.  
 ASSISTANT PROFESSORS ROSE AND TRUESDALE
- 141-142. GREEK ART.—6 s.h. ASSISTANT PROFESSOR WAY
131. HISTORY OF GREECE.—3 s.h. ASSISTANT PROFESSOR WAY
- 203-204. HOMER.—PINDAR AND BACCHYLIDES.—6 s.h.  
 ASSISTANT PROFESSOR TRUESDALE
- 207-208. GREEK ORATORS.—6 s.h. ASSISTANT PROFESSOR WAY

209-210. PLATO.—6 s.h.	ASSISTANT PROFESSOR WAY
243. ATHENIAN TOPOGRAPHY.—3 s.h.	ASSISTANT PROFESSOR WAY
244. GREEK EPIGRAPHY.—3 s.h.	ASSISTANT PROFESSOR WAY
245. GREEK DIALECTS.—3 s.h.	ASSISTANT PROFESSOR WAY
246. GREEK HISTORICAL INSCRIPTIONS.—3 s.h.	ASSISTANT PROFESSOR WAY
247-248. GREEK ARCHAEOLOGY.—6 s.h.	ASSISTANT PROFESSOR WAY

## DEPARTMENTAL MAJOR

*Prerequisites:* Greek 1-2.

*Major Requirements:* A candidate for a major in Greek must complete 24 semester hours, including the following courses: Greek 53-54, 105-106, 107-108, 117-118, and 131.

*Graduates of Duke University may attend the American School of Classical Studies at Athens, Greece, without charge for tuition, and are eligible to compete for the fellowships that are offered annually by the School. These consist of two fellowships in Greek archaeology and one in the language, literature, and history of ancient Greece, each with a stipend of \$2,000. They are awarded mainly on the basis of examinations held in the beginning of February of each year.*

## HEALTH AND PHYSICAL EDUCATION

MR. CAMERON, DIRECTOR; PROFESSOR AYCOCK; MESSRS. BLY, BRADLEY, CALDWELL CHAMBERS, COOMBS, COX, ESICK, FALCONE, GERARD, HAGLER, HARRISON, HEDSTROM, HENDRIX, HENDRICKSON, HILL, KARMAZIN, LEWIS, MONTFORT, MURRAY, PARKER, PERSONS, WADE

## SPECIAL METHODS IN PHYSICAL EDUCATION

163. ATHLETIC COACHING IN SECONDARY SCHOOLS.—Prerequisites: courses 1 and 2. Open to juniors and seniors. Sophomores by permission only. 3 s.h. MR. COOMBS, MR. CHAMBERS

164. ATHLETIC COACHING IN SECONDARY SCHOOLS.—Prerequisites: courses 1 and 2. Open to juniors and seniors. Sophomores by permission only. 3 s.h. MR. CAMERON AND STAFF

## THEORY AND PRACTICE IN PHYSICAL EDUCATION

65. HISTORY AND PRINCIPLES OF PHYSICAL EDUCATION.—3 s.h.

PROFESSOR AYCOCK

172. RECREATIONAL LEADERSHIP.—3 s.h. MESSRS. GERARD AND HARRISON

173. INDIVIDUAL GYMNASTICS.—3 s.h. PROFESSOR AYCOCK

182. THE ADMINISTRATION OF HEALTH AND PHYSICAL EDUCATION IN SECONDARY SCHOOLS.—3 s.h.

PROFESSOR AYCOCK, MESSRS. GERARD AND HARRISON

187. SCHOOL PROGRAMS OF PHYSICAL EDUCATION.—3 s.h.

MESSRS. GERARD AND HARRISON

190. PROTECTIVE PRACTICES IN PHYSICAL EDUCATION.—3 s.h.

MESSRS. CHAMBERS AND MONTFORT

## HEALTH EDUCATION

132. SCHOOL HEALTH PROBLEMS.—3 s.h.

PROFESSOR AYCOCK

## WOMAN'S COLLEGE

PROFESSOR GROUT, CHAIRMAN; ASSOCIATE PROFESSORS BOOKHOUT AND LEWIS; ASSISTANT PROFESSORS HOLTON AND SWASEY; MISS MCCORMIC, MRS. MATTHIAS, MRS. NEWCOMER, MISS PAYNE, AND MISS UHRHANE

101. HISTORY AND PRINCIPLES OF PHYSICAL EDUCATION.—2 s.h.  
PROFESSOR GROUT
102. THE TEACHING OF PHYSICAL EDUCATION IN ELEMENTARY SCHOOLS.—3 s.h.  
MRS. MATTHIAS
103. GROUP GAMES OF LOW ORGANIZATION.—2 s.h.  
ASSISTANT PROFESSOR SWASEY  
[Offered every other year alternating with P.E. 107.]
- 105-106. METHODS AND MATERIALS IN RECREATION.—6 s.h.  
ASSISTANT PROFESSOR SWASEY
107. THE TEACHING OF RHYTHMIC ACTIVITIES.—2 s.h.  
[Offered every other year alternating with P.E. 103.] ASSOCIATE PROFESSOR LEWIS
108. PROBLEMS IN COMMUNITY RECREATION.—3 s.h.  
ASSISTANT PROFESSOR SWASEY
114. KINESIOLOGY.—Prerequisites: Zoology 1 and 2, and Zoology 53. 3 s.h.  
ASSOCIATE PROFESSOR BOOKHOUT
116. KINESIOLOGY.—Prerequisite: Human Anatomy. 3 s.h.  
ASSOCIATE PROFESSOR BOOKHOUT
118. ORTHOPEDIC AND REMEDIAL PHYSICAL EDUCATION.—2 s.h.  
ASSOCIATE PROFESSOR BOOKHOUT
119. ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION.—2 s.h.  
PROFESSOR GROUT
- 181-182. METHODS AND MATERIALS IN PHYSICAL EDUCATION.—4 s.h.  
ASSOCIATE PROFESSOR LEWIS AND STAFF
- 185-186. ADVANCED METHODS AND MATERIALS IN PHYSICAL EDUCATION.—4 s.h.  
ASSOCIATE PROFESSOR LEWIS AND STAFF

## HEALTH EDUCATION

41. PERSONAL HEALTH PROBLEMS.—3 s.h. MISS UHRHANE
62. COMMUNITY HEALTH PROBLEMS.—Prerequisite: H.E. 41. 3 s.h.  
MISS UHRHANE
112. SCHOOL HEALTH PROBLEMS.—3 s.h. MISS UHRHANE

## REQUIREMENTS FOR TEACHING HEALTH AND PHYSICAL EDUCATION IN PUBLIC SCHOOLS

The following requirements have been set up for students in the Teaching Program who wish to qualify as full-time or part-time teachers of Health and Physical Education. These requirements meet the standards of the North Carolina Department of Public Instruction for certification in Health and Physical Education and of most of the other states represented in the student body. Students preparing to teach in any state are advised to check with the department as to specific requirements.

*Prerequisites:* Zoology 1-2, Health Education 41.

Thirty semester hours, including Physical Education 101, 103, 107, 114, 118, 119, 181-182, 185-186, Health Education 112 and Zoology 53, 142.

*Education Requirements:* Consult Department of Education.

Students preparing to teach physical education and health on a part-time basis only are advised to take at least the following program:

*Prerequisite:* Health Education 41.

A minimum of 15 semester hours, including Physical Education 101, 103, 107, 119, 181-182, Health Education 112.

*Education Requirements:* Consult Department of Education.

## HISTORY

PROFESSOR LAPRADE, CHAIRMAN; ASSOCIATE PROFESSOR HAMILTON, DIRECTOR OF UNDERGRADUATE STUDIES; ASSISTANT PROFESSOR FERGUSON, SUPERVISOR OF FRESHMAN INSTRUCTION; PROFESSORS CARROLL, CLYDE, LANNING, MANCHESTER, ROBERT, AND SYDNOR; ASSOCIATE PROFESSORS CURTISS, NELSON, ROPP, AND WOODY; ASSISTANT PROFESSORS ACOMB, PARKER, STEVENS, AND WATSON; DRs. COLTON, GIVAN, AND HOLLEY; MR. KYLE

1-2. HISTORICAL BACKGROUND OF THE WORLD TODAY.—6 s.h.

ASSOCIATE PROFESSORS HAMILTON AND ROPP; ASSISTANT PROFESSORS ACOMB, FERGUSON, AND PARKER; DR. COLTON AND MR. KYLE

E. 1-2. THE UNITED STATES IN THE WORLD TODAY.—6 s.h. DR. HOLLEY

51-52 HISTORICAL BACKGROUND OF THE WORLD TODAY.—6 s.h.

ASSOCIATE PROFESSORS CURTISS; ASSISTANT PROFESSOR ACOMB; DR. GIVAN

63. NAVAL HISTORY AND ELEMENTARY STRATEGY.—3 s.h.

ASSOCIATE PROFESSOR ROPP

67-68. THE BACKGROUND OF MODERN EUROPEAN CIVILIZATION.—6 s.h. ASSOCIATE PROFESSOR NELSON AND ASSISTANT PROFESSOR FERGUSON

91. THE DEVELOPMENT OF AMERICAN DEMOCRACY TO 1865.—3 s.h.

ASSISTANT PROFESSORS WATSON AND STEVENS AND DR. HOLLEY

92. THE DEVELOPMENT OF AMERICAN DEMOCRACY, 1865 TO THE PRESENT.—3 s.h. ASSISTANT PROFESSORS WATSON AND STEVENS AND DR. HOLLEY

105-106. ENGLISH CONSTITUTIONAL HISTORY.—6 s.h.

ASSOCIATE PROFESSOR HAMILTON

107-108. SOCIAL AND CULTURAL HISTORY OF ENGLAND.—6 s.h.

ASSISTANT PROFESSOR FERGUSON

109-110. CONSTITUTIONAL HISTORY OF THE UNITED STATES, 1760 TO THE PRESENT.—6 s.h. ASSISTANT PROFESSOR STEVENS

113-114. AMERICA IN THE TWENTIETH CENTURY.—6 s.h.

ASSISTANT PROFESSOR WATSON

115-116. THE AGE OF ABSOLUTE MONARCHY AND THE FRENCH REVOLUTION.—6 s.h. ASSISTANT PROFESSOR ACOMB

123-124. ENGLISH HISTORY.—6 s.h.

PROFESSOR LAPRADE

125-126. EUROPE IN THE NINETEENTH CENTURY.—6 s.h.

[Not offered in 1951-52]

ASSISTANT PROFESSOR PARKER

127. HISTORY OF LATIN AMERICA THROUGH THE FORMATION OF THE NATIONAL GOVERNMENTS.—3 s.h. PROFESSOR LANNING

128. INTER-AMERICAN AFFAIRS.—3 s.h.

PROFESSOR LANNING

129-130. EUROPEAN EXPANSION OVERSEAS.—6 s.h. PROFESSOR MANCHESTER  
[Not offered in 1951-52]

ANCIENT HISTORY.—GREEK 131—LATIN 131-132.

135-136. EUROPE IN THE TWENTIETH CENTURY.—6 s.h.

PROFESSOR CARROLL

141-142. THE FAR EAST FROM COMMODORE PERRY TO CHIANG KAI-SHEK.—6 s.h. PROFESSOR CLYDE  
[Not offered in 1951-52]

153-154. THE HISTORY OF THE SOUTH.—6 s.h. PROFESSOR SYDNOR

161-162. RUSSIA FROM IVAN THE TERRIBLE TO STALIN.—6 s.h.  
ASSOCIATE PROFESSOR CURTISS

#### FOR SENIORS AND GRADUATES

203-204. THE UNITED STATES, 1850-1900.—6 s.h. ASSOCIATE PROFESSOR WOODY

207-208. SOCIAL AND CULTURAL HISTORY OF THE UNITED STATES.—6 s.h. PROFESSOR ROBERT

209-210. AMERICAN CONSTITUTIONAL HISTORY.—Prerequisites: courses 91 and 92. 6 s.h.  
[Not offered in 1951-52]

211. THE TEACHING OF HISTORY AND THE SOCIAL STUDIES.—3 s.h.  
PROFESSOR MANCHESTER

215-216. THE FOREIGN POLICY AND DIPLOMACY OF THE UNITED STATES.—3 s.h. PROFESSOR CLYDE

217-218. EUROPE SINCE 1870.—6 s.h. PROFESSOR CARROLL

219-220. THE HISTORY OF THE EUROPEAN PROLETARIAT.—6 s.h.  
[Not offered in 1951-52] PROFESSOR CARROLL

221-222. THE AGE OF RENAISSANCE.—6 s.h.  
ASSOCIATE PROFESSOR NELSON AND ASSISTANT PROFESSOR FERGUSON

225-226. THE AGE OF THE REFORMATION.—6 s.h.  
[Not offered in 1951-52] ASSOCIATE PROFESSOR NELSON

227-228. THE NAPOLEONIC EMPIRE AND ITS AFTERMATH.—6 s.h.  
ASSISTANT PROFESSOR PARKER

230. THE PORTUGUESE EMPIRE AND THE RISE OF BRAZIL.—3 s.h.  
PROFESSOR MANCHESTER

231-232. THE HISPANIC COLONIES AND REPUBLICS IN AMERICA.—6 s.h.  
PROFESSOR LANNING

233-234. THE INSTITUTIONAL, CULTURAL, AND SOCIAL HISTORY OF HISPANIC AMERICA.—6 s.h. PROFESSOR LANNING

241-242. NATIONALISM AND REVOLUTIONARY MOVEMENTS IN THE FAR EAST SINCE 1900.—6 s.h. PROFESSOR CLYDE  
[Not offered in 1951-52]

245-246. WAR IN THE MODERN WORLD.—6 s.h. ASSOCIATE PROFESSOR ROPP

261-262. RUSSIA IN THE TWENTIETH CENTURY.—6 s.h.  
ASSOCIATE PROFESSOR CURTISS

263-264. AMERICAN COLONIAL HISTORY AND THE REVOLUTION, 1606-1783.—6 s.h. ASSOCIATE PROFESSOR WOODY

#### DEPARTMENTAL MAJOR

*Prerequisites:* The Introductory Course in History (I-2 or 51-52).

*Major Requirements:* Students in the General Group desiring to take a major in history are required to elect 24 semester hours in the Department, including six semester hours in the senior year from courses in the 200 group. Students desiring to take the more advanced courses in American history should elect courses 91 and 92 in the sophomore or junior year.



## LATIN AND ROMAN STUDIES

PROFESSOR ROGERS, CHAIRMAN AND DIRECTOR OF UNDERGRADUATE STUDIES; ASSISTANT  
PROFESSOR ROSE, SUPERVISOR OF FRESHMAN INSTRUCTION;  
MESSRS. DELHOMME AND HIGHFILL

- 1-2. COURSE FOR BEGINNERS.—6 s.h. THE STAFF
3. CICERO'S ORATIONS.—Prerequisite: two entrance units of Latin. 3 s.h.  
THE STAFF
4. VERGIL'S *AENEID*.—Prerequisite: three entrance units and Latin 57 taken  
in the semester preceding admission to the course, unless Latin 3 was taken. 3 s.h.  
THE STAFF
51. LATIN PROSE.—3 s.h. THE STAFF
52. LATIN POETRY.—3 s.h. THE STAFF
57. SIGHT READING IN CLASSICAL LATIN.—1 s.h.  
ASSISTANT PROFESSOR ROSE
58. SIGHT READING IN MEDIAEVAL LATIN.—Prerequisite: at least one of  
the following courses: Latin 3, 4, 51, 52, and 57, or an equivalent. 1 s.h.  
ASSISTANT PROFESSOR ROSE
- 65-66. LATIN PROSE COMPOSITION.—2 s.h. ASSISTANT PROFESSOR ROSE
101. TACITUS.—3 s.h. PROFESSOR ROGERS
102. JUVENAL.—3 s.h. PROFESSOR ROGERS
103. CICERO.—3 s.h. PROFESSOR ROGERS OR ASSISTANT PROFESSOR ROSE
104. LUCRETIUS.—3 s.h. PROFESSOR ROGERS OR ASSISTANT PROFESSOR ROSE
109. MATERIALS AND METHODS.—Prerequisite: eighteen approved semester  
hours of college Latin, including courses 51-52, or equivalent courses. 3 s.h.  
ASSISTANT PROFESSOR ROSE
- 111-112. ROMAN LITERATURE IN ENGLISH TRANSLATION.—6 s.h.  
ASSISTANT PROFESSOR ROSE
- 113-114. ROMAN CIVILIZATION.
- 115-116. ART AND ARCHITECTURE OF ANCIENT ROME.
- 131-132. HISTORY OF ROME.—6 s.h. PROFESSOR ROGERS
- 203-204. ROMAN EPIC: ENNIUS, VERGIL, MANILIUS, LUCAN, FLACCUS,  
STATIUS, SILIUS.—6 s.h.
- 205-206. ROMAN DRAMA.—6 s.h.
- 207-208. ROMAN PHILOSOPHY.
- 209-210. VULGAR LATIN: INTRODUCTION TO ROMANCE PHILOLOGY.
- 211-212. ROMAN ORATORY.—6 s.h. PROFESSOR ROGERS
215. ROMAN ART AND ARCHAEOLOGY.
216. TOPOGRAPHY AND MONUMENTS OF ANCIENT ROME.

## DEPARTMENTAL MAJOR

*Prerequisites:* Latin 1-2, 3-4, or acceptable equivalents.

*Major Requirements:* Latin 51-52, 65-66, twelve semester hours in courses 101,  
104, and in the senior year six semester hours in courses of the 200-group.

Majors are recommended to elect course 131-132, History of Rome. Majors who  
contemplate graduate work are reminded of the necessity of Greek, German, and  
French for such study.

## MATHEMATICS

PROFESSOR GERGEN, CHAIRMAN; ASSOCIATE PROFESSOR DRESSEL, DIRECTOR OF UNDERGRADUATE STUDIES; ASSISTANT PROFESSOR HICKSON, SUPERVISOR OF FRESHMAN INSTRUCTION;  
 PROFESSORS CARLITZ, ELLIOTT, RANKIN, ROBERTS, AND THOMAS; ASSISTANT  
 PROFESSOR PATTERSON; DRS. ESTILL AND FULTON; MESSRS. HERBST,  
 OLSON, SILVA, AND SMYTHE; AND ASSISTANTS

1. INTERMEDIATE ALGEBRA.—Prerequisite: one unit in algebra and one unit in geometry. 3 s.h. STAFF
5. COLLEGE ALGEBRA.—Prerequisite: Mathematics I, or one and one-half units in algebra and one unit in geometry. 3 s.h. STAFF
6. PLANE TRIGONOMETRY.—Prerequisite: Mathematics I, or one and one-half units in algebra and one unit in geometry. 3 s.h. STAFF
15. SPHERICAL GEOMETRY AND TRIGONOMETRY.—Prerequisite: Mathematics 5 and 6. 3 s.h. STAFF
16. MATHEMATICS OF INVESTMENT.—Prerequisite: Mathematics 5. 3 s.h. STAFF
50. PLANE ANALYTIC GEOMETRY.—Prerequisite: Mathematics 5 and 6. 3 s.h. STAFF
51. CALCULUS I.—Prerequisite: must be preceded or accompanied by Mathematics 50. 3 s.h. STAFF
52. CALCULUS II.—Prerequisite: Mathematics 51. 3 s.h. STAFF
53. CALCULUS III.—Prerequisite: Mathematics 52. 3 s.h. STAFF
123. HIGHER ALGEBRA.—Prerequisite: Mathematics 52, or permission of the instructor. 3 s.h. ASSISTANT PROFESSOR HICKSON
124. STATISTICS.—Prerequisite: Mathematics 53. 3 s.h. ASSISTANT PROFESSOR HICKSON
125. ELEMENTARY THEORY OF EQUATIONS.—Prerequisite: Mathematics 53. 3 s.h. STAFF  
 [Not offered in 1951-52]
131. ELEMENTARY DIFFERENTIAL EQUATIONS.—Prerequisite: Mathematics 52. 3 s.h. STAFF
- 139-140. ADVANCED CALCULUS.—Prerequisite: Mathematics 53. 6 s.h. PROFESSOR ELLIOTT
160. ELEMENTARY SOLID ANALYTIC GEOMETRY.—Prerequisite: Mathematics 53. 3 s.h. STAFF

## FOR SENIORS AND GRADUATES

201. HISTORY OF MATHEMATICS.—Prerequisite: Mathematics 51. 3 s.h. PROFESSOR RANKIN  
 [Not offered in 1951-52]
204. TEACHING OF MATHEMATICS.—Prerequisite: must be preceded or accompanied by Mathematics 52. 3 s.h. PROFESSOR RANKIN  
 [Not offered in 1951-52]
226. GALOIS THEORY OF EQUATIONS.—Prerequisite: Mathematics 53. 3 s.h. PROFESSOR THOMAS
- 227-228. THEORY OF NUMBERS.—Prerequisite: Mathematics 53. 6 s.h. PROFESSOR CARLITZ
- 229-230. ALGEBRAIC NUMBERS.—Prerequisite: Mathematics 125. 6 s.h. PROFESSOR CARLITZ
- 235-236. ABSTRACT ALGEBRA.—Prerequisite: Mathematics 53. 6 s.h. PROFESSOR CARLITZ

- 247-248. ARITHMETIC OF POLYNOMIALS.—Prerequisite: Mathematics 235, or consent of the instructor. 6 s.h. PROFESSOR CARLITZ
250. HIGHER GEOMETRY.—3 s.h. PROFESSOR THOMAS
- 255-256. PROJECTIVE GEOMETRY.—Prerequisite: Mathematics 53. 6 s.h. PROFESSOR THOMAS
258. FINITE DIFFERENCES.—Prerequisite: Mathematics 53. 3 s.h. PROFESSOR CARLITZ
- 271-272. INTRODUCTORY TOPOLOGY.—Prerequisite: Mathematics 53. 6 s.h. PROFESSOR ROBERTS
275. PROBABILITY.—Prerequisite: Mathematics 53. 3 s.h. ASSOCIATE PROFESSOR DRESSEL
285. MATHEMATICAL ANALYSIS FOR CHEMISTS AND PHYSICISTS.—Prerequisite: Mathematics 53. 3 s.h. ASSOCIATE PROFESSOR DRESSEL
286. MATHEMATICAL ANALYSIS FOR CHEMISTS AND PHYSICISTS.—Prerequisite: Mathematics 53. 3 s.h. ASSOCIATE PROFESSOR DRESSEL
- 291-292. THEORY OF FUNCTIONS.—Prerequisite: Mathematics 53. 6 s.h. PROFESSOR THOMAS

### DEPARTMENTAL MAJOR

The student who is planning to take his major work in mathematics is advised to consult with the Director of Undergraduate Studies of the Department as early as possible in his college work. The specific major and related work requirements are as follows.

For the A.B. degree:

*Prerequisite:* Mathematics 5 and 6.

*Major and Related Work:* 42 semester hours.

*Major Requirements:* Mathematics 50, 51, 52, 53, and 12 semester hours in courses in Mathematics numbered above 100, exclusive of Mathematics 201, 204. The total amount of work which the student may take in Mathematics toward the A.B. degree is limited to 36 semester hours.

*Related Work:* 18-24 semester hours of course work, ordinarily in the following departments: chemistry, economics and business administration, philosophy, physics. This work must be approved by the Department of Mathematics through the Director of Undergraduate Studies of the Department. It may include at most one 6 or 8 semester hour introductory course. The work must be taken in at least two departments.

For the B.S. degree:

*Prerequisite:* Mathematics 5 and 6.

*Major and Related Work:* 48 semester hours.

*Major Requirements:* Mathematics 50, 51, 52, 53, and 12 semester hours in courses in mathematics numbered above 100, exclusive of Mathematics 201, 204. The total amount of work which the student may take in mathematics toward the B.S. degree is limited to 40 semester hours.

*Related Work:* 14-24 semester hours of course work in the natural sciences. This work must be approved by the Department of Mathematics through the Director of Undergraduate Studies of the Department. It may include at most one course primarily open to freshmen. A minimum of 8 semester hours must be in laboratory science. The work must be taken in at least two departments.

### MEDICAL SCIENCE

These courses in medical science have been approved by the Faculty Council as appropriate for the Bachelor's degree.

103. HUMAN PHYSIOLOGY.—Prerequisites: Chemistry 1-2, and Zoology 1-2. 6 s.h. ASSOCIATE PROFESSOR MCCREA AND STAFF

109. ANATOMY RELATED TO MOTION.—Prerequisite: Zoology 1-2. 8 s.h. PROFESSOR MARKEE AND STAFF

## NAVAL SCIENCE

PROFESSOR EARLE, CAPTAIN, U. S. NAVY; ASSOCIATE PROFESSOR VAN ARSDALL, COMMANDER, U. S. NAVY; ASSOCIATE PROFESSOR HARRELL, LIEUTENANT COMMANDER, U. S. NAVY; ASSISTANT PROFESSORS BRACKETT, BREWER, AND GUSTAFSON, LIEUTENANTS, U. S. NAVY; AND ASSISTANT PROFESSOR FETTERS, CAPTAIN, U. S. MARINE CORPS

Standardized titles and designators for courses are established by the Bureau of Naval Personnel for use at the 52 NROTC institutions. The first digit indicates the year of the course; the second digit indicates whether semester or quarter (0 for semester, 1 for quarter); the third digit indicates the semester or quarter of school year in which offered. Specialized courses for Marine Corps officer candidates are indicated by the letter "M" after the designator, and substitute for the basic course of the same number.

- NS-101. NAVAL ORIENTATION.—3 s.h. CAPTAIN EARLE, LIEUTENANT BREWER  
 NS-102. NAVAL ORIENTATION.—3 s.h. CAPTAIN EARLE, LIEUTENANT BREWER  
 NS-102. NAVAL ORIENTATION.—3 s.h. LIEUTENANT BRACKETT  
 NS-202. NAVAL WEAPONS.—3 s.h. LIEUTENANT BRACKETT  
 NS-301. NAVIGATION.—3 s.h. COMMANDER VAN ARSDALL AND LT. CDR. HARRELL  
 NS-302. NAVIGATION.—3 s.h. COMMANDER VAN ARSDALL AND LT. CDR. HARRELL  
 NS-302M. HISTORY OF THE ART OF WAR.—3 s.h. CAPTAIN FETTERS, USMC  
 NS-401. NAVAL MACHINERY AND DIESEL ENGINES.—3 s.h. LIEUTENANT GUSTAFSON  
 NS-401E. NAVAL MACHINERY, SHIP STABILITY.—1 s.h. COMMANDER VAN ARSDALL  
 NS-402. SHIP STABILITY, NAVAL JUSTICE, AND LEADERSHIP.—3 s.h. LIEUTENANT GUSTAFSON  
 NS-401M. UNITED STATES MILITARY HISTORY AND POLICY.—3 s.h. CAPTAIN FETTERS, USMC  
 NS-402M. AMPHIBIOUS WARFARE.—3 s.h. CAPTAIN FETTERS, USMC

## REQUIREMENTS FOR COMMISSION

*Naval Science:* 24 semester hours.

*University courses:* Completion of course requirements to qualify for the baccalaureate degree, or higher. These courses must include Mathematics 6, and Physics 1, 2 or 51, 52, to be completed by the end of the sophomore year. Physical training must be taken in accordance with University requirements, and each student must include such instruction in swimming as to qualify him as a first class swimmer.

*Summer training:* Regular NROTC students must participate in three periods of training on board ship or at naval stations. Contract students are required to take one training cruise of three weeks' duration, normally between the junior and senior years.

## PHILOSOPHY

PROFESSOR NEGLEY, CHAIRMAN; ASSOCIATE PROFESSOR MCLARTY, DIRECTOR OF UNDERGRADUATE STUDIES; ASSISTANT PROFESSOR WELSH, SUPERVISOR OF FRESHMAN INSTRUCTION; PROFESSORS GILBERT, PATTERSON, AND WIDGERY;  
 DR. DUNHAM

48. LOGIC.—3 s.h. ASSISTANT PROFESSOR WELSH; DR. DUNHAM  
 49. ETHICS.—3 s.h. PROFESSOR GILBERT AND ASSISTANT PROFESSOR WELSH

91. INTRODUCTION TO PHILOSOPHY.—3 s.h.  
PROFESSORS GILBERT AND WIDGERY; ASSISTANT PROFESSOR  
WELSH; DR. DUNHAM
93. HISTORY OF PHILOSOPHY: ANCIENT AND MEDIAEVAL.—3 s.h.  
PROFESSOR PATTERSON
94. HISTORY OF PHILOSOPHY: MODERN.—3 s.h.  
PROFESSOR WIDGERY; ASSOCIATE PROFESSOR McLARTY
97. POLITICAL AND SOCIAL PHILOSOPHY.—3 s.h. PROFESSOR NEGLEY
98. SOCIAL IDEALS AND UTOPIAS.—3 s.h. PROFESSOR NEGLEY
99. FUNDAMENTALS OF CHRISTIAN MORALITY: AN INTRODUCTION  
TO CHRISTIAN ETHICS.—3 s.h. ASSOCIATE PROFESSOR McLARTY
103. LOGIC.—Prerequisite: Philosophy 48. 3 s.h. DR. DUNHAM
104. SCIENTIFIC METHODOLOGY.—3 s.h. DR. DUNHAM
108. PHILOSOPHICAL IDEAS IN ANCIENT GREEK AND ROMAN CUL-  
TURE.—3 s.h. ASSOCIATE PROFESSOR McLARTY
109. INTRODUCTION TO SEMANTIC ANALYSIS.—3 s.h.  
ASSISTANT PROFESSOR WELSH
116. THE DEVELOPMENT OF PHILOSOPHY IN AMERICA.—3 s.h.  
PROFESSOR NEGLEY
117. THE HISTORY OF ETHICS.—3 s.h. ASSISTANT PROFESSOR WELSH
121. THE PHILOSOPHY OF PLATO.—3 s.h. ASSOCIATE PROFESSOR McLARTY
199. PHILOSOPHY OF RELIGION.—3 s.h. PROFESSOR PATTERSON
- FOR SENIORS AND GRADUATES
- 201-202. THE PHILOSOPHY OF ART.—6 s.h. PROFESSOR GILBERT
203. CONTEMPORARY ETHICAL THEORIES.—3 s.h. PROFESSOR NEGLEY
205. THE PHILOSOPHY OF HISTORY.—3 s.h. PROFESSOR WIDGERY
208. POLITICAL PHILOSOPHY.—3 s.h. PROFESSOR NEGLEY
- 209-210. THE PHILOSOPHY OF RELIGION.—6 s.h. PROFESSOR WIDGERY
211. HISTORY OF ANCIENT PHILOSOPHY.—3 s.h.  
ASSOCIATE PROFESSOR McLARTY
212. HISTORY OF MODERN PHILOSOPHY.—3 s.h. PROFESSOR PATTERSON  
[Not offered in 1951-52]
- 213-214. HISTORY OF AESTHETICS.—6 s.h. PROFESSOR GILBERT
217. THE PHILOSOPHY OF ARISTOTLE.—Prerequisite: course 93 or 211.  
ASSOCIATE PROFESSOR McLARTY
218. MEDIAEVAL PHILOSOPHY.—3 s.h. PROFESSOR PATTERSON  
[Not offered in 1951-52]
223. CONTEMPORARY PHILOSOPHY.—3 s.h. PROFESSOR PATTERSON
225. LOCKE, BERKELEY, HUME.—3 s.h. ASSISTANT PROFESSOR WELSH
231. PHILOSOPHY OF SCIENCE I.—3 s.h.
236. ORIENTAL PHILOSOPHY I.—3 s.h. PROFESSOR WIDGERY
238. ORIENTAL PHILOSOPHY II.—3 s.h. PROFESSOR WIDGERY
242. SCIENTIFIC METHODOLOGY.—3 s.h.



## DEPARTMENTAL MAJOR

*Prerequisite:* Philosophy 48, but this course may be taken concurrently with courses that count toward the major.

*Major Requirements:* Twenty-four semester hours in philosophy. The program must include:

3 semester hours in the history of ancient philosophy (Course 93 or 211).

3 semester hours in the history of modern philosophy (Course 94 or 212).

Philosophy 117 (waived for students who take Course 49).

6 semester hours of work in the 200 series.

The prospective major should consult the director of undergraduate studies.

## PHYSICS

PROFESSOR NIELSEN, CHAIRMAN; PROFESSOR HATLEY, DIRECTOR OF UNDERGRADUATE STUDIES; PROFESSOR CARPENTER, SUPERVISOR OF FRESHMAN INSTRUCTION; PROFESSORS GORDY, NEWSON, NORDHEIM, AND SPONER; VISITING PROFESSOR WANG; ASSOCIATE PROFESSORS GREULING AND SMITH; ASSISTANT PROFESSOR LEWIS; DRs. BROWN AND TRAMBARULO; AND ASSISTANTS

## 1-2. INTRODUCTORY PHYSICS.—8 s.h.

PROFESSORS CARPENTER AND HATLEY AND STAFF; AND ASSISTANTS

51-52. GENERAL PHYSICS.—Prerequisite: Mathematics 5-6 or equivalent (Mathematics 6 may be taken concurrently). 10 s.h.

PROFESSORS HATLEY AND CARPENTER AND STAFF; AND ASSISTANTS

125. INTERMEDIATE PHYSICS—MECHANICS.—Prerequisites: Physics 1-2 or 51-52 or equivalent, and a course in differential and integral calculus which may be taken concurrently. 3 s.h.

PROFESSOR NIELSEN

126. INTERMEDIATE PHYSICS—ELECTRICITY.—Prerequisites: Physics 125 or equivalent work approved by the instructor, and differential and integral calculus. Integral calculus may be taken concurrently. 4 s.h.

ASSISTANT PROFESSOR LEWIS

175. INTERMEDIATE PHYSICS—OPTICS.—Prerequisites: Physics 125 and 126 or equivalent work approved by instructor and differential and integral calculus. 4 s.h.

ASSISTANT PROFESSOR LEWIS

176. INTERMEDIATE PHYSICS—THERMODYNAMICS AND KINETIC THEORY.—Prerequisites: Physics 125 or equivalent work approved by the instructor, and differential and integral calculus. 3 s.h.

PROFESSOR NIELSEN OR PROFESSOR NEWSON

A course in general college physics, Physics 125 and 126 or equivalent validated by examination, and a course in differential and integral calculus are prerequisites to all courses numbered 200 and above.

## 201-202. MECHANICS.—6 s.h.

ASSOCIATE PROFESSOR SMITH

## 203-204. ELECTRICITY AND MAGNETISM.—6 s.h.

ASSOCIATE PROFESSOR SMITH

## 205. SPECTROSCOPY.—4 s.h.

PROFESSOR SPONER

## 213-214. CONTEMPORARY PHYSICS.—6 s.h.

ASSOCIATE PROFESSOR GREULING

## 217-218. ADVANCED PHYSICS LABORATORY.—2-6 s.h.

THE STAFF

## 219. ELECTRON TUBES AND THEIR APPLICATION.—4 s.h.

ASSOCIATE PROFESSOR SMITH

## 220. ELECTRONIC CIRCUIT ANALYSIS.—3 s.h.

PROFESSOR GORDY OR ASSOCIATE PROFESSOR SMITH

## 225-226. ELEMENTARY INVESTIGATIONS.—3-6 s.h.

THE STAFF

## DEPARTMENTAL MAJOR

## A. For the A. B. degree:

*Prerequisites:* Physics 1-2 or 51-52 or equivalent, and Mathematics 5-6.

*Major Requirements:* Eighteen to 24 semester hours in physics including Physics 125, 126, 175 and 176 or equivalent.

## B. For the B.S. degree:

*Prerequisites:* Physics 1-2 or 51-52 or equivalent, Chemistry 1-2 and Mathematics 5-6 or equivalent.

*Major Requirements:* Not less than 24 semester hours in physics including Physics 125, 126, 175 and 176 or equivalent.

## POLITICAL SCIENCE

PROFESSOR RANKIN, CHAIRMAN AND DIRECTOR OF UNDERGRADUATE STUDIES; PROFESSORS COLE, CONNERY, HALLOWELL, VON BECKERATH, AND WILSON; LECTURER ELLIS; ASSOCIATE PROFESSOR SIMPSON; ASSISTANT PROFESSORS HANSON, RICHARDS, AND TRAVIS; DR. CHEEK; MESSRS. SEYLER AND WINTER

21. PRINCIPLES OF GOVERNMENT.—3 s.h. ASSISTANT PROFESSOR TRAVIS
22. GOVERNMENTAL PROBLEMS IN INTERNATIONAL RELATIONS.—3 s.h. ASSISTANT PROFESSOR TRAVIS
- 61-62. AMERICAN GOVERNMENT AND POLITICS.—6 s.h.  
PROFESSOR CONNERY; DR. ELLIS; ASSOCIATE PROFESSOR SIMPSON;  
ASSISTANT PROFESSORS RICHARDS, HANSON; DR.  
CHEEK; MR. SEYLER, MR. WINTER
- 63-64. MODERN CONSTITUTIONAL GOVERNMENT.—6 s.h. DR. ELLIS
111. SURVEY OF FAR EASTERN POLITICS.—3 s.h. DR. ELLIS
112. CONTEMPORARY PROBLEMS IN FAR EASTERN POLITICS.—3 s.h.  
DR. ELLIS
- 121-122. ELEMENTS OF INTERNATIONAL RELATIONS.—6 s.h. DR. ELLIS
123. INTRODUCTION TO POLITICAL PHILOSOPHY.—3 s.h.  
PROFESSOR HALLOWELL
125. AMERICAN POLITICAL PARTIES AND PRACTICAL POLITICS.—3 s.h.  
ASSOCIATE PROFESSOR SIMPSON
136. MAJOR EUROPEAN GOVERNMENTS.—3 s.h.  
PROFESSORS HALLOWELL AND COLE
141. PUBLIC ADMINISTRATION.—3 s.h. ASSISTANT PROFESSOR RICHARDS
146. LEGISLATION.—3 s.h. ASSOCIATE PROFESSOR SIMPSON
151. LATIN-AMERICAN POLITICAL INSTITUTIONS.—3 s.h.  
ASSISTANT PROFESSOR TRAVIS
152. LATIN-AMERICAN POLITICAL INSTITUTIONS.—3 s.h.  
ASSISTANT PROFESSOR TRAVIS
161. GOVERNMENT AND PLANNING.—3 s.h. ASSISTANT PROFESSOR HANSON
164. GOVERNMENT CONTROL OF PUBLIC UTILITIES.—3 s.h.  
ASSISTANT PROFESSOR HANSON
174. POLITICS AND ECONOMICS.—3 s.h. PROFESSOR VON BECKERATH
207. AMERICAN CONSTITUTIONAL LAW AND THEORY.—3 s.h.  
PROFESSORS WILSON AND RANKIN
209. STATE AND LOCAL GOVERNMENT IN THE UNITED STATES.—3 s.h.  
PROFESSOR RANKIN

211. POLITICAL INSTITUTIONS OF THE FAR EAST.—3 s.h.  
[Not offered in 1951-52]
212. INTERNATIONAL POLITICS OF THE FAR EAST.—3 s.h.  
[Not offered in 1951-52]
221. INTERNATIONAL PUBLIC ORGANIZATIONS.—3 s.h.  
ASSISTANT PROFESSOR TRAVIS
223. POLITICAL THOUGHT TO THE SEVENTEENTH CENTURY.—3 s.h.  
PROFESSOR WILSON
224. MODERN POLITICAL THEORY.—3 s.h.  
PROFESSORS WILSON AND HALLOWELL
225. COMPARATIVE GOVERNMENT.—3 s.h. PROFESSOR COLE
226. COMPARATIVE GOVERNMENT.—3 s.h. PROFESSOR COLE
- 227-228. INTERNATIONAL LAW.—6 s.h. PROFESSOR WILSON
229. RECENT AND CONTEMPORARY POLITICAL THEORY.—3 s.h.  
PROFESSOR HALLOWELL
230. AMERICAN POLITICAL INSTITUTIONS.—3 s.h. PROFESSOR RANKIN
231. AMERICAN POLITICAL THEORY.—3 s.h. PROFESSOR HALLOWELL
235. THE COMMONWEALTH (BRITISH).—3 s.h. PROFESSOR COLE
241. NATIONAL ADMINISTRATION.—3 s.h. PROFESSOR CONNERY
242. ADMINISTRATIVE MANAGEMENT.—3 s.h. PROFESSOR CONNERY
244. ADMINISTRATIVE LAW.—3 s.h. PROFESSOR CONNERY  
[Not offered in 1951-52]
246. GOVERNMENT ADMINISTRATION AND PUBLIC POLICY.—3 s.h.  
PROFESSOR CONNERY
247. REGULATORY ADMINISTRATION.—3 s.h. PROFESSOR CONNERY  
[Not offered in 1951-52]
252. SPANISH-AMERICAN CONSTITUTIONALISM.—3 s.h.
271. SOCIOPOLITICS AND CAPITALISM.—3 s.h. PROFESSOR VON BECKERATH
291. MUNICIPAL GOVERNMENT.—3 s.h. PROFESSOR RANKIN
292. MUNICIPAL ADMINISTRATION.—3 s.h. PROFESSOR RANKIN

## DEPARTMENTAL MAJOR

*Prerequisite:* Political Science 61-62 or 63-64.

*Major Requirements:* Eighteen semester hours of work in the Department above courses 61-62 or 63-64, including at least nine semester hours in Senior-Graduate courses.

## PSYCHOLOGY

PROFESSOR RODNICK, CHAIRMAN; ASSISTANT PROFESSOR GOFFARD, DIRECTOR OF UNDER-GRADUATE STUDIES; PROFESSORS ADAMS, DAI, KUDER, LUNDHOLM, AND ZENER;  
ASSOCIATE PROFESSORS BANIAM AND KOCH; ASSISTANT PROFESSORS  
COHEN, GARMEZY, MCHUGH, AND REICHENBERG-HACKETT;  
LECTURER, DR. KLOPPER

91-92. GENERAL PSYCHOLOGY.—6 s.h. STAFF

Course 91-92 or its equivalent is a prerequisite for all other courses in psychology.

104. COMPARATIVE PSYCHOLOGY.—3 s.h.

106. ABNORMAL PSYCHOLOGY.—3 s.h. PROFESSOR LUNDHOLM

107. PSYCHOLOGICAL ANALYSIS OF PROMINENT CHARACTERS IN LITERATURE.—3 s.h. PROFESSOR LUNDHOLM
109. INTRODUCTORY SOCIAL PSYCHOLOGY.—3 s.h. ASSISTANT PROFESSOR McHUGH
110. APPLIED PSYCHOLOGY.—3 s.h. ASSISTANT PROFESSOR McHUGH
111. ADVANCED GENERAL PSYCHOLOGY.—3 s.h. ASSISTANT PROFESSOR GOFFARD
115. PSYCHOLOGY OF PERSONALITY.—3 s.h. ASSISTANT PROFESSOR REICHENBERG-HACKETT
116. PSYCHOLOGY OF ADJUSTMENT.—3 s.h. ASSISTANT PROFESSOR REICHENBERG-HACKETT
119. ELEMENTARY LABORATORY PSYCHOLOGY.—4 s.h. ASSISTANT PROFESSOR GOFFARD
120. BASIC STATISTICAL TECHNIQUES IN PSYCHOLOGY.—3 s.h. ASSISTANT PROFESSOR GOFFARD
121. CHILD PSYCHOLOGY.—3 s.h. ASSISTANT PROFESSOR McHUGH
122. ADJUSTMENT OF THE PRE-SCHOOL CHILD.—Prerequisites: Psychology 121 or equivalent and permission of the instructor. 3 s.h. ASSISTANT PROFESSOR REICHENBERG-HACKETT
126. ADOLESCENT PSYCHOLOGY.—Prerequisite: Psychology 121 or Education 8 or 88. 3 s.h. ASSISTANT PROFESSOR McHUGH
130. PRINCIPLES IN THE EVALUATION OF BEHAVIOR PROBLEMS.—Prerequisite: Psychology 106. 3 s.h. ASSISTANT PROFESSOR GARMEZY
203. DYNAMIC PSYCHOLOGY: CONATION AND OUR CONSCIOUS LIFE.—3 s.h. PROFESSOR LUNDHOLM
206. SOCIAL PSYCHOLOGY.—3 s.h. PROFESSOR ADAMS
207. PSYCHOLOGY OF MEMORY, THINKING, AND PERCEIVING.—3 s.h. PROFESSOR ZENER
212. PHYSIOLOGICAL PSYCHOLOGY.—3 s.h. PROFESSOR ZENER
215. DEVELOPMENTAL PSYCHOLOGY.—3 s.h. PROFESSOR ADAMS
223. ABNORMAL PSYCHOLOGY.—3 s.h. PROFESSOR LUNDHOLM
228. PSYCHOLOGY OF BELIEF.—3 s.h. PROFESSOR LUNDHOLM
- 231-232. INTRODUCTION TO RESEARCH. STAFF
236. THEORETICAL PSYCHOLOGY.—3 s.h. ASSOCIATE PROFESSOR KOCH
266. ADVANCED STATISTICS OF PSYCHOLOGICAL INVESTIGATION.—Prerequisite: Psychology 120 or equivalent. 3 s.h. PROFESSOR KUDER

## DEPARTMENTAL MAJOR

*Prerequisite:* Psychology 91-92 or equivalent.

*Major Requirements:* 24 semester hours of work in the department, including Psychology 91-92, Psychology 119 (Elementary Laboratory), and one semester of psychological statistics. Related work must include Zoology 1 and 2 or equivalent in biology, and 6 semester hours of sociology or anthropology.

## RELIGION

PROFESSOR MYERS, CHAIRMAN AND DIRECTOR OF UNDERGRADUATE STUDIES; PROFESSORS CANNON, CLARK, HICKMAN, SPENCE, AND STINESPRING; ASSOCIATE PROFESSOR CRUM; ASSISTANT PROFESSORS BRADLEY, BROWNLEE, ECKARDT, PHILLIPS, AND SPENCE; DR. PERRY AND MR. SALES

## 1. THE ENGLISH BIBLE.—3 s.h.

ASSOCIATE PROFESSOR CRUM; ASSISTANT PROFESSORS BRADLEY, ECKARDT, AND SPENCE; DR. PERRY AND MR. SALES

2. THE ENGLISH BIBLE.—Although Religion 1 is not a prerequisite, it will be an aid to the student to complete 1 before taking 2. 3 s.h.

ASSOCIATE PROFESSOR CRUM; ASSISTANT PROFESSORS BRADLEY, ECKARDT, AND SPENCE; DR. PERRY AND MR. SALES

51. THE ENGLISH BIBLE.—3 s.h.

PROFESSOR MYERS; ASSISTANT PROFESSORS BRADLEY, ECKARDT, AND SPENCE; DR. PERRY AND MR. SALES

52. THE ENGLISH BIBLE.—3 s.h.

PROFESSOR MYERS; ASSISTANT PROFESSORS BRADLEY, ECKARDT, AND SPENCE; DR. PERRY AND MR. SALES

91. FUNDAMENTALS OF CHRISTIAN MORALITY: AN INTRODUCTION TO CHRISTIAN ETHICS.—(Identical with Philosophy 99.) 3 s.h.

ASSOCIATE PROFESSOR McLARTY

101. THE SOCIAL TEACHINGS OF THE PROPHETS AND JESUS.—3 s.h.

ASSISTANT PROFESSOR PHILLIPS

103. THE PROPHETS OF THE OLD TESTAMENT.—3 s.h.

PROFESSOR MYERS

104. THE HISTORY AND RELIGION OF THE JEWS TO THE ROMAN PERIOD.—3 s.h.

PROFESSOR MYERS AND ASSISTANT PROFESSOR ECKARDT

114. THE LIFE AND TEACHINGS OF JESUS.—3 s.h.

PROFESSOR MYERS

130. THE HISTORIC CHURCH AND MODERN SOCIAL ISSUES.—Prerequisites: one of the following courses, Religion 1, 2, 51, 52, 101, 103, 104. 3 s.h.

[Old number 102]

ASSISTANT PROFESSOR ECKARDT

132. THE CHRISTIAN AND CONTEMPORARY SOCIAL PROBLEMS.—Prerequisites: one of the following courses, Religion 1, 2, 51, 52, 101, 103, 104. 3 s.h.

[Old number 167]

ASSISTANT PROFESSOR PHILLIPS

163. RELIGIOUS EDUCATION OF CHILDREN.—3 s.h.

ASSISTANT PROFESSOR SPENCE

168. MASTERPIECES OF GREAT RELIGIOUS LITERATURE.—3 s.h.

PROFESSOR SPENCE

169. CHARACTER PROBLEMS.—3 s.h.

ASSOCIATE PROFESSOR CRUM

170. RELIGION AND THE FAMILY.—3 s.h.

ASSOCIATE PROFESSOR CRUM

171. INTRODUCTION TO THE PSYCHOLOGY OF RELIGION.—3 s.h.

PROFESSOR HICKMAN

181. THE NATURE AND EARLY DEVELOPMENT OF RELIGION.—3 s.h.

PROFESSOR CANNON AND ASSISTANT PROFESSOR ECKARDT

182. LIVING RELIGIONS OF THE WORLD.—3 s.h.

PROFESSOR CANNON AND DR. PERRY

183. THE RELIGIOUS AND SOCIAL CONTRIBUTIONS OF THE WORLD'S GREAT RELIGIONS.—3 s.h.

PROFESSOR SPENCE AND ASSISTANT PROFESSOR BRADLEY

192. CHRISTIAN BELIEFS.—Prerequisite: 3 semester hours of Bible. 3 s.h.

ASSISTANT PROFESSOR BRADLEY

193. A STUDY OF MATERIALS SUITABLE FOR PUBLIC SCHOOL COURSES IN RELIGION AND ETHICS, including the English Bible and other religious literature. 3 s.h.

ASSOCIATE PROFESSOR CRUM

201-202. FIRST HEBREW.—6 s.h.

PROFESSOR STINESPRING

207-208. SECOND HEBREW.—6 s.h.

ASSISTANT PROFESSOR BROWNLEE

211-212. HELLENISTIC GREEK.—6 s.h.

PROFESSOR CLARK

265. RELIGIOUS DRAMA.—3 s.h.

PROFESSOR SPENCE



## 268. RELIGIOUS DRAMA CONSTRUCTION AND PRODUCTION.—3 s.h.

PROFESSOR SPENCE

## DEPARTMENTAL MAJOR

*Prerequisite:* Religion 1-2, or 51-52.

*Major Requirements:* A major in the Department of Religion consists of 18 semester hours of work, exclusive of courses primarily for freshmen, selected with the approval of the instructor under whose supervision the student does his major work. Six of the 18 semester hours must be in courses with biblical content.

## ROMANCE LANGUAGES

PROFESSOR JORDAN, CHAIRMAN; PROFESSOR WALTON, DIRECTOR OF UNDERGRADUATE STUDIES IN FRENCH; ASSOCIATE PROFESSOR DAVIS, DIRECTOR OF UNDERGRADUATE STUDIES IN SPANISH; ASSISTANT PROFESSOR DOW, SUPERVISOR OF FRESHMAN STUDIES IN FRENCH;

MR. PRATT, SUPERVISOR OF FRESHMAN STUDIES IN SPANISH; PROFESSORS

COWPER AND PREDMORE; ASSOCIATE PROFESSOR CASTELLANO; ASSISTANT

PROFESSORS ARCHIE, DEMOREST, AND FEIN; DRs. LEWIS, LLERENA,

AND STRIPLING; MISS BLUE, MRS. CASTELLANO, MR. CORDLE,

AND MRS. DOW

## FRENCH

1-2. ELEMENTARY FRENCH.—6 s.h. ASSISTANT PROFESSOR DOW AND STAFF

3-4. INTERMEDIATE FRENCH.—*Prerequisite:* French 1 and 2 or two years of high-school French. 6 s.h. ASSISTANT PROFESSOR DOW AND STAFF

51-52. INTRODUCTION TO FRENCH LITERATURE.—*Prerequisite:* French 3 and 4 or equivalent. 6 s.h. PROFESSOR WALTON AND STAFF

55. INTERMEDIATE CONVERSATION.—1 s.h. MRS. DOW

56. INTERMEDIATE CONVERSATION.—*Prerequisite:* French 55. To be taken concurrently with French 52. 1 s.h. MRS. DOW

108. THE FRENCH ROMANTIC MOVEMENT.—3 s.h. DR. LEWIS

111-112. FRENCH DRAMA SINCE 1850.—6 s.h. ASSISTANT PROFESSOR DOW

123. LIBERAL THINKERS OF THE EIGHTEENTH CENTURY.—3 s.h. ASSISTANT PROFESSOR ARCHIE

127-128. ADVANCED COMPOSITION AND CONVERSATION.—6 s.h. MRS. DOW

134. CONTEMPORARY FRENCH LIFE AND THOUGHT.—*Prerequisite:* French 52 or equivalent. 3 s.h. DR. DEMOREST

213. FRENCH CLASSICISM.—3 s.h. PROFESSOR WALTON

214. FRENCH CLASSICISM.—3 s.h. PROFESSOR WALTON

215-216. THE MODERN FRENCH NOVEL.—6 s.h. PROFESSOR JORDAN

219. OLD FRENCH.—3 s.h. PROFESSOR COWPER

220. OLD FRENCH.—3 s.h. PROFESSOR COWPER

227. FRENCH POETRY SINCE THÉOPHILE GAUTIER.—3 s.h. PROFESSOR WALTON  
[Not offered in 1951-52]

232. ROUSSEAU AND THE BEGINNINGS OF ROMANTICISM.—3 s.h. PROFESSOR COWPER  
[Not offered in 1951-52]

238. ANATOLE FRANCE.—3 s.h. PROFESSOR WALTON  
[Not offered in 1951-52]

## SPANISH

1-2. ELEMENTARY SPANISH.—6 s.h. MR. PRATT AND STAFF

3-4. INTERMEDIATE SPANISH.—*Prerequisite:* Spanish 1-2 or two years of high-school Spanish. 6 s.h. ASSOCIATE PROFESSOR DAVIS AND STAFF

65. INTRODUCTION TO MODERN SPANISH LITERATURE.—Prerequisite: Spanish 3-4, or equivalent. 3 s.h. ASSOCIATE PROFESSOR CASTELLANO AND STAFF
66. INTRODUCTION TO MODERN SPANISH LITERATURE.—Prerequisite: Spanish 65 or equivalent. 3 s.h. ASSOCIATE PROFESSOR CASTELLANO AND STAFF
68. INTRODUCTION TO SPANISH-AMERICAN LITERATURE.—3 s.h.  
STAFF
71. INTERMEDIATE CONVERSATION.—Prerequisite: completion of Spanish 4 or consent of instructor. 1 s.h. MRS. CASTELLANO
72. INTERMEDIATE CONVERSATION.—Prerequisite: Spanish 71. 1 s.h.  
MRS. CASTELLANO
155. REPRESENTATIVE WRITERS OF SPANISH-AMERICAN LITERATURE.—3 s.h. ASSISTANT PROFESSOR FEIN
156. REPRESENTATIVE WRITERS OF SPANISH-AMERICAN LITERATURE.—3 s.h. ASSISTANT PROFESSOR FEIN
173. ADVANCED CONVERSATION.—Prerequisite: Spanish 66 (or 68) and 71-72, or permission. 3 s.h. ASSOCIATE PROFESSOR CASTELLANO
174. PHONETICS AND DICTION.—Prerequisite: Spanish 173 or special permission. 3 s.h. ASSOCIATE PROFESSOR CASTELLANO
257. OLD SPANISH LANGUAGE.—3 s.h. ASSOCIATE PROFESSOR DAVIS
258. OLD SPANISH LITERATURE.—3 s.h. ASSOCIATE PROFESSOR DAVIS
260. ADVANCED COMPOSITION AND SYNTAX.—Prerequisite: Spanish 173-174 or permission. 3 s.h. ASSOCIATE PROFESSOR CASTELLANO
- 261-262. MODERN SPANISH NOVEL.—Prerequisite: 6 semester hours from courses 155 to 174 inclusive, or 65-66 (or 68) and instructor's permission. 6 s.h.
264. MODERN AND CONTEMPORARY SPANISH THEATRE.—3 s.h.  
ASSOCIATE PROFESSOR CASTELLANO
265. GOLDEN AGE LITERATURE: CERVANTES.—3 s.h. PROFESSOR PREDMORE
266. GOLDEN AGE LITERATURE: THE DRAMA.—3 s.h.  
ASSOCIATE PROFESSOR CASTELLANO
275. CONTEMPORARY SPANISH LITERATURE: ESSAY AND LYRIC POETRY.—3 s.h. PROFESSOR PREDMORE
276. CONTEMPORARY SPANISH LITERATURE: NOVEL.—3 s.h.  
PROFESSOR PREDMORE

#### THE TEACHING OF ROMANCE LANGUAGES

118. THE TEACHING OF ROMANCE LANGUAGES.—3 s.h.

ASSOCIATE PROFESSOR DAVIS

#### DEPARTMENTAL MAJOR

##### *Prerequisites:*

For French: French 51-52, or equivalent.

For Spanish: Spanish 65-66 (or 68), or equivalent.

##### *Major Requirements:*

For French: Eighteen semester hours of work must be completed in courses numbered above 100 and must include: (a) six semester hours in course 127-128; (b) six semester hours of literature in courses 213 to 238.

For Spanish: Eighteen semester hours of work must be completed in courses numbered above 100 and must include: (a) six semester hours of linguistic training (courses 173-174, 260); (b) six semester hours of literature in the courses numbered above 200.

## RUSSIAN

ASSISTANT PROFESSOR WIENER

51-52. INTRODUCTION TO THE RUSSIAN LANGUAGE.—6 s.h.

ASSISTANT PROFESSOR WIENER

53-54. INTERMEDIATE RUSSIAN LANGUAGE.—Prerequisite: Russian 51-52 or equivalent. 6 s.h.

ASSISTANT PROFESSOR WIENER

63-64. INTRODUCTION TO SCIENTIFIC AND MEDICAL RUSSIAN.—Prerequisite: Russian 51-52 or equivalent. 6 s.h.  
[Not offered in 1951-52]

ASSISTANT PROFESSOR WIENER

101-102. RUSSIAN CULTURE AND LITERATURE THROUGH THE NINETEENTH CENTURY.—6 s.h.

ASSISTANT PROFESSOR WIENER

103. AN INTRODUCTION TO SOVIET LITERATURE AND CULTURE.—3 s.h.

ASSISTANT PROFESSOR WIENER

112. PUSHKIN AND THE BIRTH OF RUSSIAN REALISM.—Prerequisite: Russian 101 or consent of the instructor. 3 s.h.

ASSISTANT PROFESSOR WIENER

## SOCIOLOGY AND ANTHROPOLOGY

PROFESSOR JENSEN, CHAIRMAN AND DIRECTOR OF UNDERGRADUATE STUDIES, EAST CAMPUS;  
 ASSOCIATE PROFESSOR SCHETTLER, DIRECTOR OF UNDERGRADUATE STUDIES, WEST  
 CAMPUS, AND SUPERVISOR OF FRESHMAN INSTRUCTION; PROFESSORS HART  
 AND THOMPSON; ASSOCIATE PROFESSOR LA BARRE; ASSISTANT PROFESSOR  
 WHITRIDGE; MR. ROY

91-92. GENERAL SOCIOLOGY.—6 s.h.

PROFESSOR JENSEN; ASSOCIATE PROFESSOR SCHETTLER;  
 ASSISTANT PROFESSOR WHITRIDGE; MR. ROY

101. GENERAL SOCIOLOGY.—5 s.h. *each semester.*

MR. ROY

## I. ANTHROPOLOGY

111. GENERAL ANTHROPOLOGY.—3 s.h. ASSOCIATE PROFESSOR LA BARRE

112. CULTURAL ANTHROPOLOGY.—3 s.h. ASSOCIATE PROFESSOR LA BARRE

211. PEOPLES OF THE WORLD.—Prerequisite: course 91-92, or 101, or 111  
or 112. 3 s.h. ASSOCIATE PROFESSOR LA BARRE212. PRIMITIVE RELIGION.—Prerequisite: course 91-92, or 101, or 111 or 112.  
3 s.h. ASSOCIATE PROFESSOR LA BARRE213. PERSONALITY AND SOCIETY.—Prerequisite: course 91-92, or 101, or 111  
or 112. 3 s.h. ASSOCIATE PROFESSOR LA BARRE  
[Admission only by consultation with the instructor.]

214. PERSONALITY AND CULTURE.—Prerequisite: course 213. 3 s.h.

ASSOCIATE PROFESSOR LA BARRE  
 [Admission only by consultation with the instructor.]

## II. COMMUNITY, RACE AND CULTURE

(Course 91-92, or 101, or 111 or 112 prerequisite for all courses.)

133. SOCIOLOGY OF THE SOUTH.—3 s.h. PROFESSOR THOMPSON

134. HUMAN ECOLOGY.—3 s.h. PROFESSOR THOMPSON

136. HUMAN MIGRATION.—3 s.h.  
[Not offered in 1951-52] PROFESSOR THOMPSON137. THE NEGRO IN AMERICA.—3 s.h.  
[Not offered in 1951-52] PROFESSOR THOMPSON

233. RURAL SOCIOLOGY.—3 s.h. PROFESSOR THOMPSON

235. URBAN SOCIOLOGY.—3 s.h. PROFESSOR THOMPSON  
 237. COMMUNITY AND SOCIETY.—3 s.h. PROFESSOR THOMPSON  
 238. RACE AND CULTURE.—3 s.h. PROFESSOR THOMPSON

### III. COLLECTIVE BEHAVIOR

(Course 91-92, or 101, or 111 or 112 prerequisite for all courses.)

142. THE SOCIOLOGY OF DISCUSSION.—Prerequisites: either Sociology 91, 101, or 111, and six hours to be selected from history, political science, Economics 105 and 155, and Education 115 and 176. 3 s.h. PROFESSOR HART  
 149. INTRODUCTION TO CHILD WELFARE.—3 s.h. PROFESSOR JENSEN  
 243. SOCIAL ATTITUDES AND COLLECTIVE BEHAVIOR.—3 s.h.  
 ASSOCIATE PROFESSOR SCHETTLE  
 246. PUBLIC OPINION AND PROPAGANDA.—3 s.h.  
 ASSOCIATE PROFESSOR SCHETTLE  
 249. CHILD WELFARE.—3 s.h. PROFESSOR JENSEN  
 [Not offered in 1951-52]  
 250. MARRIAGE AND THE FAMILY.—3 s.h. PROFESSOR HART

### IV. SOCIAL ORGANIZATION AND DISORGANIZATION

(Course 91-92, or 101, or 111 or 112 prerequisite for all courses.)

153. THE FIELDS OF SOCIAL WORK.—3 s.h. ASSISTANT PROFESSOR WHITRIDGE  
 157. SOCIAL CHANGE AND SOCIAL CONTROL.—3 s.h.  
 ASSOCIATE PROFESSOR SCHETTLE  
 158. SOCIOLOGY OF THE PROFESSIONS AND OCCUPATIONS.—3 s.h.  
 ASSOCIATE PROFESSOR SCHETTLE  
 165. INTRODUCTION TO INDUSTRIAL SOCIOLOGY.—3 s.h. MR. ROY  
 166. INDUSTRY AND SOCIETY.—3 s.h. MR. ROY  
 262. EDUCATION AND THE CULTURAL PROCESS.—3 s.h.  
 [Not offered in 1951-52] PROFESSOR THOMPSON  
 271. SOCIAL PATHOLOGY.—3 s.h. PROFESSOR JENSEN  
 273. SPECIAL PROBLEMS IN SOCIAL PATHOLOGY.—1 to 3 *each semester*.  
 PROFESSOR JENSEN  
 275. CRIMINOLOGY.—3 s.h. PROFESSOR JENSEN  
 277. JUVENILE DELINQUENCY.—3 s.h.

### V. SOCIAL THEORY

(Course 91-92, or 101, or 111 or 112 prerequisite for all courses.)

286. SOCIAL ETHICS.—3 s.h. PROFESSOR HART  
 288. CONTEMPORARY PROBLEMS IN CULTURAL LAG.—3 s.h.  
 PROFESSOR HART

### VI. METHODS OF SOCIAL RESEARCH

(Course 91-92, or 101, or 111 or 112 prerequisite for all courses.)

191. PRINCIPLES OF SOCIAL CASE INVESTIGATION.—3 s.h.  
 ASSISTANT PROFESSOR WHITRIDGE  
 193. BASIC STATISTICAL METHODS IN SOCIOLOGY.—3 s.h.  
 PROFESSOR HART  
 292. STATISTICAL TECHNIQUES IN SOCIOLOGY.—3 s.h. PROFESSOR HART  
 293. SPECIAL PROBLEMS IN SOCIAL STATISTICS.—1 to 3 s.h. *each semester*.  
 PROFESSOR HART

## DEPARTMENTAL MAJOR

Sociology 91-92 or 101 and twelve additional hours, at least six semester hours of which must be Senior-Graduate courses.

## ZOOLOGY

PROFESSOR GRAY, CHAIRMAN; ASSOCIATE PROFESSOR BOOKHOUT, DIRECTOR OF UNDERGRADUATE STUDIES; ASSISTANT PROFESSOR ROBERTS, SUPERVISOR OF FRESHMAN INSTRUCTION; PROFESSORS HARGITT AND WILBUR; ASSOCIATE PROFESSORS HUNTER AND WHARTON; ASSISTANT PROFESSORS BAILEY AND HORN; DR. SANDEEN; MESSRS. BALL, COLE AND WILKS;

MRS. BURKUS

## UNDERGRADUATE COURSES

1. GENERAL ZOOLOGY.—4 s.h.  
ASSOCIATE PROFESSORS BOOKHOUT AND HUNTER AND STAFF
  2. ANIMAL BIOLOGY.—Prerequisite: Zoology 1. 4 s.h.  
ASSOCIATE PROFESSOR HUNTER AND ASSISTANT PROFESSOR ROBERTS AND STAFF
  53. COMPARATIVE VERTEBRATE ANATOMY.—Prerequisites: Zoology 1, 2.  
4 s.h. ASSISTANT PROFESSOR ROBERTS AND STAFF
  92. GENERAL EMBRYOLOGY.—Prerequisite: Zoology 53. 4 s.h.  
ASSISTANT PROFESSOR HORN AND STAFF
  109. EVOLUTION.—Prerequisite: two years of zoology. 2 s.h.  
ASSISTANT PROFESSOR BAILEY
  110. INTRODUCTION TO GENETICS.—Prerequisite: one year of zoology. 2 s.h.  
ASSISTANT PROFESSOR ROBERTS
  120. ORNITHOLOGY.—Prerequisite: one year of zoology. Zoology 53 recommended. 4 s.h.  
ASSISTANT PROFESSOR BAILEY
  142. INTRODUCTION TO HUMAN PHYSIOLOGY.—Prerequisite: Zoology 53.  
4 s.h. DR. SANDEEN
  152. COMPARATIVE PHYSIOLOGY.—Prerequisites: one year of zoology and at least one year of chemistry. 4 s.h. PROFESSOR WILBUR
  156. VERTEBRATE HISTOLOGY.—Prerequisite: Zoology 53. 4 s.h.  
PROFESSOR HARGITT
  161. ANIMAL PARASITES.—Prerequisite: one year of zoology. 4 s.h.  
ASSOCIATE PROFESSOR WHARTON
  193. FUNDAMENTALS OF ZOOLOGY.—3 s.h. PROFESSOR GRAY
  196. SEMINAR: CURRENT DEVELOPMENTS IN ZOOLOGY.—Prerequisites: Zoology 53, 92, and 152 or 271. 2 s.h. STAFF
- FOR SENIORS AND GRADUATES
202. HELMINTHOLOGY.—Prerequisite: Zoology 161. 4 s.h.  
ASSOCIATE PROFESSOR HUNTER
  204. ADVANCED PARASITOLOGY.—Prerequisite: Zoology 161. 4 s.h.  
ASSOCIATE PROFESSOR WHARTON
  - 219, 220. SPECIAL PROBLEMS.—Not more than 4 s.h. STAFF
  222. ENTOMOLOGY.—Prerequisite: One year of Zoology. 4 s.h.  
PROFESSOR GRAY
  224. VERTEBRATE ZOOLOGY.—Prerequisite: Zoology 53. 4 s.h.  
PROFESSOR GRAY
  229. ENDOCRINOLOGY.—Prerequisites: Zoology 53, 92. 4 s.h.
  238. SYSTEMATIC ZOOLOGY.—Prerequisites: Zoology 1, 2. 4 s.h.  
ASSOCIATE PROFESSOR WHARTON



253. ADVANCED VERTEBRATE MORPHOLOGY.—Prerequisites: Zoology 53, 92. 4 s.h. ASSISTANT PROFESSOR HORN

271. GENERAL PHYSIOLOGY.—Prerequisites: two years of biology and at least one year of chemistry. 4 s.h. PROFESSOR WILBUR

274. INVERTEBRATE ZOOLOGY.—Prerequisites: Zoology 1, 2. 4 s.h. ASSOCIATE PROFESSOR BOOKHOUT

276. PROTOZOOLOGY.—Prerequisites: Zoology 1, 2. 4 s.h. ASSOCIATE PROFESSOR BOOKHOUT

278. INVERTEBRATE EMBRYOLOGY.—Prerequisite: Zoology 92. 4 s.h. ASSOCIATE PROFESSOR BOOKHOUT

For summer courses in Marine Biology consult the Bulletin of the Duke University Marine Laboratory.

RELATED COURSES, ONE OF WHICH MAY BE COUNTED TOWARD A  
MAJOR IN ZOOLOGY

BOTANY 101. PRINCIPLES OF HEREDITY.—3 or 4 s.h. (w) ASSOCIATE PROFESSOR PERRY

BOTANY 202. GENETICS.—4 s.h. (w) ASSOCIATE PROFESSOR PERRY

DEPARTMENTAL MAJOR

*Prerequisites:* Zoology 1 and 2.

*Major Requirements:* Twenty-four semester hours including courses 53, 92, and 152 or 271. The remaining twelve hours may be from any other courses for which the student is eligible. Related work, usually chosen from courses in botany, chemistry, geology, mathematics, and physics, must include at least one year of chemistry.

# Courses of Instruction College of Engineering



## CIVIL ENGINEERING

PROFESSORS BIRD AND HALL; ASSOCIATE PROFESSOR SNOW; ASSISTANT PROFESSORS LEWIS, PALMER, AND WILLIAMS; MESSRS. BROWN AND WILDER

61. PLANE SURVEYING.—Prerequisites: G.E. 1 and Math 6. 4 s.h.  
Mr. BROWN
62. ADVANCED SURVEYING.—Prerequisite: C. E. 61. 4 s.h. Mr. BROWN
108. ADVANCED STRENGTH OF MATERIALS.—Prerequisite: G.E. 107. 3 s.h.  
ASSISTANT PROFESSOR WILLIAMS
- S110. PLANE SURVEYING.—4 s.h. Mr. BROWN
113. ROUTE SURVEYING.—Prerequisite: C.E. 61. 3 s.h.  
ASSISTANT PROFESSOR WILLIAMS
116. HIGHWAY ENGINEERING.—Prerequisites: C.E. 113, C.E. 135. 3 s.h.  
ASSISTANT PROFESSOR WILLIAMS
118. MATERIALS OF ENGINEERING.—Prerequisite: G.E. 107 or concurrent.  
3 s.h. ASSISTANT PROFESSOR WILLIAMS
120. ENGINEERING STATISTICS.—3 s.h. ASSOCIATE PROFESSOR SNOW
121. HYDROLOGY.—Prerequisite: G.E. 128. 3 s.h. ASSOCIATE PROFESSOR SNOW
123. WATER SUPPLY AND SEWAGE.—Prerequisite: G.E. 128. 4 s.h.  
ASSOCIATE PROFESSOR SNOW
124. WATER PURIFICATION AND SEWAGE TREATMENT.—Prerequisite:  
C.E. 123. 3 s.h. ASSOCIATE PROFESSOR SNOW
128. INDUSTRIAL WATER SUPPLIES.—Prerequisite: Chemistry 1-2. 3 s.h.  
ASSOCIATE PROFESSOR SNOW
- 129-130. ELEMENTARY STRUCTURES.—Prerequisite: G.E. 107. 6 s.h.  
ASSISTANT PROFESSOR PALMER
131. STRUCTURES.—ANALYSIS AND ELEMENTARY DESIGN.—Prerequi-  
sites: G.E. 57, 107. 5 s.h. ASSISTANT PROFESSOR PALMER
132. STRUCTURES.—DESIGN.—Prerequisite: C.E. 131. 5 s.h.  
ASSISTANT PROFESSOR PALMER
133. REINFORCED CONCRETE.—Prerequisite: G.E. 107. 4 s.h.  
PROFESSOR BIRD
135. SOIL MECHANICS.—Prerequisite: G.E. 107. 3 s.h. PROFESSOR BIRD
- 137-138. SEMINAR.—2 s.h. ASSISTANT PROFESSOR PALMER
140. INDETERMINATE STRUCTURES.—Prerequisites: C.E. 131, C.E. 133.  
3 s.h. PROFESSOR BIRD

142. HYDRAULIC ENGINEERING.—Prerequisite: G.E. 128 or M.E. 105. 3 s.h.  
ASSISTANT PROFESSOR WILLIAMS

143-144. PROJECTS IN CIVIL ENGINEERING.—2-6 s.h. STAFF

### ELECTRICAL ENGINEERING

PROFESSOR SEELEY, CHAIRMAN; ASSOCIATE PROFESSOR MEIER; ASSISTANT PROFESSORS  
EGERTON, KRAYBILL, AND VAIL; MESSRS. HEDGECOCK, JARRETT, AND JENKINS

51. SURVEY OF ELECTRICAL ENGINEERING.—1 s.h.

ASSISTANT PROFESSOR KRAYBILL

52. ELECTRIC AND MAGNETIC FIELDS.—Prerequisites: E.E. 51, Mathematics  
52. 3 s.h. ASSISTANT PROFESSOR VAIL

101-102. CIRCUITS IN ELECTRICAL ENGINEERING.—Prerequisite: E.E. 52,  
E.E. 107-108 and Mathematics 131 concurrently. 6 s.h. ASSISTANT PROFESSOR VAIL

105. ELECTRICAL MEASUREMENTS.—Prerequisite: E.E. 52. Mathematics  
131 and E.E. 101 concurrently. 4 s.h. MR. HEDGECOCK

106. ELECTRON TUBES AND CIRCUITS.—Prerequisites: E.E. 101, E.E. 105,  
E.E. 107, E.E. 102 and E.E. 108 concurrently. 4 s.h. MR. HEDGECOCK

107-108. CIRCUITS LABORATORY.—2 s.h.

ASSISTANT PROFESSORS VAIL AND KRAYBILL

123. PRINCIPLES OF ELECTRIC CIRCUITS.—Prerequisites: Mathematics 52  
and Physics 52. 4 s.h. ASSISTANT PROFESSORS KRAYBILL AND EGERTON; MR. JARRETT

124. PRINCIPLES OF ELECTRIC MACHINERY.—Prerequisite: E.E. 123. 4 s.h.  
ASSISTANT PROFESSORS KRAYBILL AND EGERTON; MR. JARRETT

148. DIRECT-CURRENT MACHINERY.—Prerequisites: E.E. 101 and E.E. 107,  
E.E. 102 and E.E. 108 concurrently. 3 s.h.

ASSOCIATE PROFESSOR MEIER AND MR. JARRETT

158. ELECTRIC-POWER SYSTEMS.—Prerequisites: E.E. 148, M.E. 104, and  
permission of instructor. E.E. 257-258 concurrently. 3 s.h. PROFESSOR SEELEY

159. TRANSMISSION.—Prerequisites: E.E. 101-102, E.E. 105, E.E. 106, Mathe-  
matics 131. 3 s.h. PROFESSOR SEELEY

161. HIGH-VOLTAGE ENGINEERING.—Prerequisites: E.E. 101-102, E.E. 105,  
E.E. 106, and permission of instructor. 3 s.h. ASSISTANT PROFESSOR VAIL

163-164. ELECTRIC MACHINERY LABORATORY.—2 s.h.

ASSOCIATE PROFESSOR MEIER AND MR. JARRETT

165-166. ELECTRICAL ENGINEERING SEMINAR.—2 s.h. STAFF

171. FUNDAMENTALS OF ILLUMINATION.—Prerequisites: E.E. 101-102 or  
E.E. 123, and permission of instructor. 3 s.h. ASSISTANT PROFESSOR KRAYBILL

173-174. PROJECTS IN ELECTRICAL ENGINEERING.—3-6 s.h. STAFF

180. RADIO-FREQUENCY TRANSMISSION AND PROPAGATION.—Pre-  
requisites: E.E. 159, E.E. 261, and permission of instructor. E.E. 262 concurrently.  
3 s.h. MR. JENKINS

197. INDUSTRIAL APPLICATIONS OF ELECTRICAL EQUIPMENT.—Pre-  
requisite: E.E. 124 and permission of instructor. 3 s.h. ASSOCIATE PROFESSOR MEIER

198. INDUSTRIAL CONTROL.—Prerequisites: E.E. 101-102, E.E. 106, E.E. 148,  
E.E. 257, and permission of the instructor. E.E. 258 concurrently. 3 s.h.

ASSOCIATE PROFESSOR MEIER

257-258. ALTERNATING-CURRENT MACHINERY.—Prerequisites: E.E. 101-  
102 and E.E. 148. 6 s.h. ASSOCIATE PROFESSOR MEIER AND MR. JARRETT

261. COMMUNICATION ENGINEERING.—Prerequisites: E.E. 101-102, E.E.  
105, E.E. 106, and Mathematics 131. 4 s.h. MR. JENKINS

262. COMMUNICATION ENGINEERING.—Prerequisite: E.E. 261. 4 s.h.

Mr. JENKINS

263-264. OPERATIONAL CIRCUIT ANALYSIS.—Prerequisites: E.E. 101-102, Mathematics 131, and permission of instructor. 6 s.h.

PROFESSOR SEELEY

## MECHANICAL ENGINEERING

PROFESSOR R. S. WILBUR, CHAIRMAN; ASSOCIATE PROFESSOR REED; ASSISTANT PROFESSORS FULTON AND KENYON; MESSRS. ELSEVIER, HOLLAND, RABIN, AND L. C. WILBUR

51. CONSTRUCTIVE PROCESSES.—Prerequisite: Chemistry 2. 3 s.h.

MESSRS. HOLLAND AND L. C. WILBUR

52. KINETICS-MECHANISM.—Prerequisites: G.E. 2, G.E. 57, Mathematics 52. 4 s.h.

ASSISTANT PROFESSOR FULTON, MESSRS. HOLLAND AND L. C. WILBUR

55. STEAM ENGINEERING.—Prerequisites: Chemistry 2. 2 s.h.

PROFESSOR R. S. WILBUR, ASSISTANT PROFESSOR KENYON

101-102. ENGINEERING THERMODYNAMICS.—Prerequisites: Mathematics 52, Physics 52, M.E. 55. 6 s.h.

PROFESSOR R. S. WILBUR, ASSISTANT PROFESSORS FULTON AND KENYON

103-104. HEAT POWER ENGINEERING.—Prerequisites: Chemistry 2, Mathematics 52, Physics 52. 3 s.h.

ASSOCIATE PROFESSOR REED, ASSISTANT PROFESSOR KENYON, AND Mr. L. C. WILBUR

105. FLUID MECHANICS.—Prerequisites: M.E. 52, Mathematics 52, Physics 52. 3 s.h.

ASSISTANT PROFESSOR KENYON AND Mr. L. C. WILBUR

106. HEAT TRANSFER.—Prerequisites: M.E. 101 or 103, M.E. 105 or G.E. 128, Mathematics 52. M.E. 102 or 104 concurrently. 3 s.h.

ASSOCIATE PROFESSOR REED AND ASSISTANT PROFESSOR FULTON

108. AERONAUTICS.—Prerequisite: M.E. 105. 3 s.h.

Mr. ELSEVIER

113-114. JUNIOR MECHANICAL ENGINEERING LABORATORY.—Prerequisite: M.E. 55. M.E. 101-102 concurrently. 3 s.h.

PROFESSOR R. S. WILBUR AND STAFF

115-116. JUNIOR MECHANICAL ENGINEERING LABORATORY.—M.E. 103-104 concurrently. 2 s.h.

PROFESSOR R. S. WILBUR AND STAFF

150-151. MACHINE DESIGN.—Prerequisites: G.E. 2, M.E. 52, G.E. 57, M.E. 51, G.E. 107. 7 s.h.

MESSRS. HOLLAND AND L. C. WILBUR

153-154. HEATING, AIR CONDITIONING AND REFRIGERATION.—Prerequisites: M.E. 102, M.E. 105, M.E. 106. M.E. 159-160 concurrently. 6 s.h.

ASSOCIATE PROFESSOR REED AND Mr. ELSEVIER

155. INTERNAL COMBUSTION ENGINES.—Prerequisite: M.E. 101-102. 3 s.h.

ASSISTANT PROFESSOR FULTON AND Mr. ELSEVIER

157. CENTRIFUGAL PUMPS AND BLOWERS.—Prerequisite: M.E. 105. 3 s.h.

ASSISTANT PROFESSOR FULTON

158. INDUSTRIAL ENGINEERING.—3 s.h.

ASSISTANT PROFESSOR LEWIS AND Mr. HOLLAND

159. SENIOR MECHANICAL ENGINEERING LABORATORY.—Prerequisite: M.E. 114. M.E. 153 concurrently. 2 s.h.

PROFESSOR R. S. WILBUR AND STAFF

160. SENIOR MECHANICAL ENGINEERING LABORATORY.—Prerequisite: M.E. 159. M.E. 154 and M.E. 162 concurrently. 2 s.h.

PROFESSOR R. S. WILBUR AND STAFF

162. POWER PLANT CALCULATIONS.—Prerequisite: M.E. 101-102 or 103-104. 3 s.h.

PROFESSOR R. S. WILBUR

164. ENGINEERING ANALYSIS.—3 s.h.

Mr. L. C. WILBUR

166. AIR CONDITIONING DESIGN.—3 s.h.

ASSOCIATE PROFESSOR REED

197-198. PROJECTS IN MECHANICAL ENGINEERING.—3-6 s.h.

PROFESSOR R. S. WILBUR AND STAFF

## GENERAL ENGINEERING

## STAFF

1. ENGINEERING DRAWING.—2 s.h.

STAFF

2. DESCRIPTIVE GEOMETRY.—Prerequisite: G.E. 1. 2 s.h.

STAFF

57. STATICS.—Prerequisite: G.E. 1. G.E. 2. Mathematics 52 concurrent. 3 s.h.

STAFF

58. DYNAMICS.—Prerequisites: G.E. 57 and Mathematics 52. 3 s.h.

STAFF

101. CONSTRUCTION METHODS.—Prerequisite: Junior standing. 3 s.h.

MR. WILDER

102. MOTION AND TIME STUDY.—Prerequisite: Junior standing. 3 s.h.

MR. WILDER

107. STRENGTH OF MATERIALS.—Prerequisite: G.E. 57. 3 s.h.

STAFF

109. STRENGTH OF MATERIALS LABORATORY.—1 s.h.

STAFF

128. HYDRAULICS.—Prerequisite: G.E. 57. 3 s.h.

STAFF



# Student Life and Activities



**CONDUCT AND DISCIPLINE:** The University expects of its students loyal and hearty cooperation in developing and maintaining high standards of conduct as well as of scholarship. The University therefore reserves the right, and matriculation by the student is a concession of this right, to ask the withdrawal of any student whose conduct at any time is not satisfactory to the University, even though no specific charge be made against the student.

General oversight of the conduct of students and the administering of discipline are under the supervision of the Vice-President in the Division of Student Life. The duty of immediate supervision, guidance, and control of the students in each college is entrusted to the dean of that college. However, through the expressed willingness of the students of the University to assume the responsibility of maintaining high standards of morals and honor, the student body has properly become to a great degree self-governing. Two councils, one of men and the other of women, each composed of duly elected representatives of the student body, exercise the authority granted the students for their respective colleges to investigate all cases of misconduct, as well as all other cases of violation of proper student standards and traditions, and to make recommendations of penalties based on their findings.

The student councils have been helpful to the administrative authorities of the University. They exert a guiding and stimulating influence for the promotion of high ideals of conduct and of student relationships.

**ASSEMBLY AND CLASS MEETINGS:** The sophomore, junior and senior classes of Trinity College and the College of Engineering meet on call to discuss matters pertinent to the individual group. The freshman classes of these colleges hold weekly meetings with compulsory attendance.

In the Woman's College an assembly of all students is held on the first, second, and fifth Monday evenings; house meetings are held on third Monday evenings; and class meetings, with the exception of the freshman class, are held on fourth Monday evenings. The freshmen meet as a class each week. In each instance, attendance is required.

**SCHOLASTIC REGULATIONS FOR PARTICIPATION IN ATHLETIC AND OTHER ACTIVITIES:** A student who receives

less than a passing grade on more than six hours of his required work of the preceding term is ineligible to represent the University in any athletic contest, concert, or other public event.

Members of athletic teams or other student groups engaging in public representation of the University are expected to be carrying their current work satisfactorily. A student may be barred from participation in such representation if, in the opinion of the dean, he fails to meet this requirement.

**RELIGIOUS LIFE:** "Eruditio et Religio," the motto emblazoned on the seal of the University, proclaims belief in the essential union of knowledge and religion in the educational process. Provisions, both academic and extra-curricular, are made for the realization of this aim. Academic offerings in the field of Religion are described elsewhere in this catalog. The description below concerns non-academic provisions.

The gothic Chapel stands at the center of the campus, an inspiring symbol of the place of religion in the well-balanced life. This is the home of Duke University Church, Interdenominational. The Church encourages the cultivation of the spiritual and moral life of students through participation in a program of varied activities.

The Service of Worship on Sunday morning has special appeal. Several hundred students participate in these services by singing in the choir, which has gained national reputation. At least one hundred other students assist in special ways, as ushers, collectors, and at communion services. Hundreds come to worship and are inspired by the beauty and challenge of these services.

But the Church also encourages the students to translate their worship into effective Christian living. A rich program of activities is offered, so that every student can find something that will challenge his interests and meet his needs as an active member of his faith.

These activities are developed along three lines: interfaith, interdenominational, and denominational. Protestant, Jewish, and Roman Catholic students are organized into their respective groups; but periodically they join together in interfaith programs which are carefully planned to respect the traditions of the various faiths. Interdenominational activities for all Protestant students are emphasized because it is believed that a more complete Christian faith is developed through sharing knowledge and fellowship with Christians of other churches.

Vital to the religious life at Duke are the various church groups known on the campus as the Protestant Denominational Groups. The Church looks to these organizations, under the leadership of their respective chaplains or advisers, to provide a continuing denominational experience through worship, study, service activities, and recreation. The promotion of churchmanship as a part of the total

educational experience at Duke is designed to equip students to assume the role of leaders in their local church when they leave the University.

Additional features of the program are the organ recitals and special musical services which are given from time to time on Sunday afternoons in the Chapel. During the summer, Carillon recitals are presented twice a week.

The total religious program is under the direction of the Official Board of the Church, composed of an equal number of faculty-staff members and students. Professional guidance is given by the Preachers to the University, the Choir Director and the Organist, the Director of Religious Activities and the Director of Religious Activities in the Woman's College, and five denominational Chaplains.

**PUBLIC LECTURES AND SOCIAL FUNCTIONS:** The Faculty Council on Public Lectures supervises all public lectures, addresses, and other public events given under the auspices of the University or of any organization in any way connected with the University. All dates and programs must be approved by the Council, which prepares an official yearly calendar. Current announcements of public occasions appear in the Weekly Calendar of Duke University issued by the Department of Alumni Affairs.

A social committee composed of students and staff members from the three colleges exercises general supervision over major social functions. The executive officers of the committee are the Dean of Men and the Dean of Residence of the Woman's College.

**MEDICAL CARE:** With the exceptions noted below, full medical and surgical care is furnished to all regularly matriculated students of the University. The cost is included in the general fee paid each semester and in the medical fee charged each student in the summer quarter. The service is under the direction of the University Physician with the cooperation of the Staffs of the Infirmarys (one on each campus) and the University Hospital. It includes hospitalization (limited to thirty days), medical and surgical care, drugs, dressings, X-ray work, and ward, but not special, nursing. The student pays for his board while in the hospital. Refraction of eyes, treatment of teeth and of all chronic and pre-existing conditions, such as diseased tonsils, hernias, elective surgery, chronic skin conditions, endocrine disturbances, etc., and accidents or illnesses occurring during vacations or while off the campus, are not included in this service. The cost of any necessary braces and orthopaedic appliances, as well as of special nursing, must be borne by the student. If the student has insurance providing hospitalization, surgical, or medical benefits, the benefits shall be applied to the cost of his medical care.

A woman physician is in residence and a nurse in constant attendance at the Woman's College Infirmary. Patients in this Infirmary

can be transferred to the Duke Hospital at any hour of the day or night. Male students receive ambulant care at the student health office in the hospital building during dispensary hours. Men are admitted to the hospital directly whenever necessary. The emergency service and the specialist consulting services of the Hospital and Medical School are always available.

The medical certificate required by the Committee on Admissions and sent to all prospective students gives advice as to certain types of medical and surgical care to be done by the home physician or surgeon prior to the departure of the student for college. The advice concerns such things as the giving of typhoid or smallpox vaccine, removal of diseased tonsils, correction of errors of refraction, repair of a hernia, or removal of a chronic appendix. Important time is frequently lost in correcting these conditions after entrance into college, and the cost of this work must be borne by the student.

When the student comes to the University, he is given a careful physical examination. Any physical defects are recorded along with the record of the questionnaire from the family physician. All students are requested to be successfully vaccinated against smallpox before admission to the University. It is urgently advised that they take typhoid vaccine if they have not done so within three years.

**PHYSICAL EDUCATION:** Students of Trinity College and the College of Engineering are required to engage in some type of physical activity for two years or four full semesters. This work consists of participation in natural, practical, physical activity for at least three one-hour periods each week. The purpose is to improve body control and strength through big muscle activities, to stimulate the development of mental and physical alertness, to establish habits of regular exercise, and to give training and experience in various kinds of recreational sports that will be indulged in after the student is graduated from the University.

Intramural sports are promoted and fostered in all phases of athletic activity. Meets, tournaments, and leagues are seasonally organized in the different sports. All students of the two colleges are eligible to enjoy the intramural privileges, provided they comply with the intramural rulings. Participation in these activities is entirely voluntary, but they are very popular because they provide an opportunity for every man to enter into competition and recreation in those sports which he enjoys most.

The work of the Physical Education Department of the Woman's College is designed in part to give the students of that college an appreciation of the value of activity for general physical well-being, skill in one or more activities which can be enjoyed as recreation during and after college, a well-developed and well-coordinated body, and a knowledge of good posture and efficient handling of the body



in everyday activities. To this end, students are allowed to choose from a large number of activities including individual, dual, and team sports, swimming, and several types of dancing. In order to insure a variety of skills, each student, during her three years of required physical education, must elect one semester's work in each of the following types of activity: individual or dual sports, and dance. All students who are unable to pass the swimming test must take one semester of swimming before graduation. In addition to the two hours per week of activity classes, all freshmen are required to take a course in orientation in physical education and body mechanics, meeting once a week during the first semester.

The Dance Group, the Swimming Club, and the Woman's Athletic Association give opportunities for all students to take part in the types of intramural activities most interesting to them. The swimming pool, tennis courts, and other athletic equipment are available to all students for use at specified times.

In order to meet certain hygienic aspects of physical education and intramural athletics, the University has made available for all students, in addition to facilities for physical activity and recreation, the following equipment and services:

1. (a) MEN. A regulation uniform: shirt, trunks, supporter, socks, sweat clothes, and towel.  
(b) WOMEN. Gym suit, dance costume, bathing suit, warm-up suit.
2. Provision for locker and handling of uniform.
3. The laundering of uniform and towel as needed.

The privileges and services listed above are available to all students who pay full fees, as long as they comply with the rules and regulations established for the care and handling of same.

**THE INTERCOLLEGIATE ATHLETIC PROGRAM:** The program, controlled entirely by the University, consists of the organization and training of representative freshman and varsity teams in football, basketball, baseball, track, cross country, swimming, lacrosse, wrestling, tennis, and golf.

The program is under the supervision of the Athletic Council, composed of seven members. Three of the seven are appointed from the faculty as follows: one member from the Officers of General Administration, one from the Officers of Educational Administration, division of the Colleges, and one from the Officers of Instruction of the undergraduate colleges. From this group the President of the University appoints the faculty chairman, who serves as chairman of the Athletic Council and of its executive committee.

Four of the seven members are selected from the alumni. One of the four, a University Trustee, an alumnus, and a member of the Board's standing Committee on Physical Education and Athletics, is appointed not less frequently than every three years by the chairman



of the Board of Trustees. The remaining three, who may not succeed themselves, are elected annually by the general Alumni Association for terms of three years. The Director of Alumni Affairs serves *ex officio* as secretary of the Council and of the executive committee.

The three faculty members of the Athletic Council constitute a committee which alone has the responsibility of enforcing the scholarship and athletic requirements of the University for participation in intercollegiate sports. The athletic eligibility rules are those of the Southern Conference.

The executive committee of the Athletic Council is composed of the faculty chairman of the Council, one other faculty member of the Council and one alumni member of the Council. The executive committee of the Council recommends to the President of the University persons to serve as Director of Athletics and as coaches in the various sports. The election of such persons, however, rests solely with the Board of Trustees of the University or with its Executive Committee on recommendation of the President of the University. The executive committee of the Council recommends to the Athletic Council athletic schedules and the award of insignia of merit earned by members of the athletic teams. However, decisions with respect to the same rest solely with the Athletic Council subject to approval of the President.

Each of the four undergraduate classes selects annually, for terms of one year, a member of each respective class to serve in an advisory capacity to the Athletic Council upon call of the faculty chairman on the matter of awarding insignia of merit.

All funds arising from athletics are handled entirely by the Treasurer of the University. An audit of the receipts and disbursements of these funds is made annually by the official auditors of the University and a report thereof made annually to the Executive Committee of the Board of Trustees.

**THE STUDENT ACTIVITIES OFFICES:** The Student Activities Offices were established for the purpose of assisting and coordinating the financial activities of the various student organizations in Trinity College, the College of Engineering, and the Woman's College.

The Offices provide for student organizations a banking service through the office of the Treasurer of the University. They also afford auditing services for organizations requiring it. Permanent records of all financial activities of organizations are kept under the supervision of the Offices. The Student Activities Offices, cooperating with the University Purchasing Department, also serve in the capacity of purchasing agent for affiliated student organizations. There is no charge for this service.

In addition to these specific services, the purpose of the Offices is to promote well-organized and effective extracurricular interest.

Student Activities Offices for Trinity College and the College of

Engineering are located on the West Campus, and for the Woman's College, on the East Campus.

**STUDENT PUBLICATIONS:** Student publications of the University are under the control of a Publications Board, which is constituted as follows: three members from the University staff and two from the alumni, appointed by the President; six men from the junior and senior classes, elected by the students in Trinity College and the College of Engineering; four women from the junior and senior classes, elected by the students in the Woman's College; and four editors and four managers of student publications, *ex officio* members without voting power. No student publications can be started at the University without the approval of the Council.

The four publications of campus-wide interest are the *Archive* (monthly); the *Chanticleer* (annual); the *Chronicle* (weekly); and the *Duke 'n' Duchess* (monthly humor). The Engineering students issue a professional bimonthly magazine, the *DukEngineer*.

**STUDENT BROADCASTING SYSTEM:** The student broadcasting system of the University is under the control of a Radio Council, which is constituted as follows: two members from the University staff, appointed by the President; three members from the faculty who serve as engineering, production, and business advisers; three men from the junior and senior classes, including one engineer, elected by the students in Trinity College and the College of Engineering; one woman from either the junior or senior class, elected by the students of the Woman's College; one man from either the junior or senior class, elected by the members of the Student Legislature of the Men's Student Government Association from within the membership of that body; one woman from either the junior or senior class, elected by the members of the Woman's Student Government Association from within the membership of that body; and four student managers of the student broadcasting system, *ex officio* members without voting power.

**STUDENT ORGANIZATIONS:** The following organizations are active on the campus: *The Men's Association of Duke University* comprises all men students in Trinity College and the College of Engineering. Through its officers and a council it initiates policies and oversees matters within the control of the student body. The council is composed of nine members: three executive officers, two representatives from the senior class, two from the junior class, one from the sophomore class, and one from the College of Engineering.

*The Woman's Student Government Association* is similiar in character to the men's association. Its council is composed of the officers of the Association, house presidents and president of the Town Girls' Club, class representatives, and chairman of the Freshman Advisory Council, *ex officio*.

*The Young Men's Christian Association* and the *Young Women's Christian Association* are branches of the national student Christian Associations. Each body aims to enrich not only the religious life of its members as individuals but also to promote religious group activity. These organizations carry on extensive activity in the fields of social service, faculty-student relations, forums, and other related projects. Membership in the Student Religious Council relates these organizations to the total religious activities program of the Duke University Church, Interdenominational.

Other organizations and activities include the following:

Bench and Bar Society (Pre-Legal Undergraduates); Class of 1951; Class of 1952; Class of 1953; Class of 1954; Classical Club (Men); Club Panamericano; Commodore Club (N.R.O.T.C. Social Organization); Debate Council (Men); Duke Independent Society (Men); Duke Masonic Club; Duke Players; Duke University Church (Interdenominational); Duke University Handbook and Directory; Duke University Steering Committee; Engineers' Club; G. O. Politan Club; Graduate Club; Hoof 'n' Horn; Interfraternity Council; Intramural Athletic Department; Men's Freshman Advisory Council; Pegram Chemistry Club; Pre-Medical Society; Publications Board; Quadrangle Pictures; Shoe and Slipper Club; Student Religious Council; Town Boys' Club; Town Girls' Club; Woman's College Student Forum; Women's Athletic Association; Women's Freshman Advisory Council; Women's Pan-Hellenic Council; Young Democrats Club; and the Campus Chest Fund.

The following honorary orders and fraternities have chapters on the campus: National—Alpha Kappa Psi (Economics); Chi Delta Phi (Literary); Delta Phi Alpha (German); Kappa Chi (Pre-Ministerial); Kappa Delta Pi (Educational); Omicron Delta Kappa (Leadership—Men); Phi Beta Kappa (Scholarship); Phi Eta Sigma (Freshman Scholarship—Men); Pi Mu Epsilon (Mathematics); Sigma Delta Pi (Spanish); Sigma Pi Sigma (Physics); Tau Kappa Alpha (Forensic); Tau Psi Omega (French); Theta Alpha Phi (Dramatic).

Local—Beta Omega Sigma (Leadership—Sophomore Men); Delta Phi Rho Alpha (Athletic—Women); Ivy (Scholarship—Freshmen Women); Mu Sigma (Psychology); Phi Kappa Delta (Leadership—Women); Red Friars (Leadership—Senior Men); Sandals (Leadership—Sophomore Women); Varsity "D" Club (Athletic—Men); White Duchy (Leadership—Senior Women).

Engineering (professional)—American Institute of Electrical Engineers; the American Society of Civil Engineers; and the American Society of Mechanical Engineers. Engineering (Honorary)—Tau Beta Pi (National Honorary Engineering Fraternity); Pi Tau Sigma (Mechanical Engineering National Honorary Society); Order of St. Patrick (Leadership).

Local musical organizations available to qualified members are: Chamber Orchestra; Concert Band; Madrigal Singers; Marching Band; Men's Glee Club; Music Study Club; Symphony Orchestra; University Chapel Choir; Women's Glee Club.

The following national social fraternities have chapters on the campus: Alpha Tau Omega; Beta Theta Pi; Chi Phi; Delta Sigma Phi; Delta Tau Delta; Kappa Alpha; Kappa Sigma; Lambda Chi Alpha; Phi Delta Theta; Phi Kappa Psi; Phi Kappa Sigma; Pi Kappa Alpha; Pi Kappa Phi; Sigma Alpha Epsilon; Sigma Chi; Sigma Nu; Sigma Phi Epsilon; Theta Chi; Zeta Beta Tau.

The following national social sororities have chapters on the campus: Alpha Chi Omega; Alpha Delta Pi; Alpha Phi; Alpha Epsilon Phi; Delta Delta Delta; Delta Gamma; Kappa Alpha Theta; Kappa Delta; Kappa Kappa Gamma; Phi Mu; Pi Beta Phi; Sigma Kappa; Zeta Tau Alpha.

# Honors and Prizes



**HONORS:** To be eligible for Honors a student must earn, during the year, credit for at least the normal load of the college in which he is registered. All semester hours on which a student receives a grade are counted in the determination of Honors. Students in the freshman, sophomore, and junior classes who earn an average of at least two and one-half quality points per semester hours are given Honors.

The degree of Bachelor of Arts or of Bachelor of Science with distinction is conferred in accordance with the following rules:

To be eligible for general Honors at graduation a student must have completed in residence a minimum of ninety semester hours. Those students who earn an average of at least two and one-half quality points per semester hour are recommended for a degree *magna cum laude*. Those who earn an average of at least two and three-fourths quality points per semester hour are recommended for a degree *summa cum laude*.

**MEDALS AND PRIZES:** *The Wiley Gray Medal* was established by the late Robert T. Gray, Esq., of Raleigh, North Carolina, to be awarded annually in memory of his brother. It is given for the graduating oration that shall be, in the opinion of a committee, the best, with respect to both declaration and composition.

*The Debate Council* authorizes the awarding of medals to members of the graduating class who have represented the University in at least two intercollegiate debates. The medals are given by the local chapter of the Tau Kappa Alpha Fraternity.

*The Robert E. Lee Prize* is the gift of The Reverend A. W. Plyler, of the Class of 1892, and Mrs. Plyler. The sum of \$50 is awarded annually at Commencement, preferably to that member of the senior class who, in character and conduct, in scholarship and athletic achievement, in manly virtues and capacity for leadership, has most nearly realized the standards of the ideal student. The dean of the college, the Graduate Manager of Athletics, and the President of the Student Council constitute a committee to draft and adopt regulations governing the award.

*Alpha Kappa Psi Medallion.* Beta Eta Chapter of Alpha Kappa Psi, a professional fraternity in commerce, awards annually the Alpha Kappa Psi Scholarship Key to the male senior student pursuing a



degree in the Department of Economics and Business Administration who has attained the highest scholastic average for three years of collegiate work in this University.

*Medal of the North Carolina Association of Certified Public Accountants.* The North Carolina Association of Certified Public Accountants annually awards a medal to the senior who, in the judgment of his instructors, is the most outstanding student in accounting in his graduating class.

*Julia Dale Prize in Mathematics.* This is a prize of books given annually to the undergraduate who shows the greatest proficiency in the study of the calculus.

*The Milnow Prize,* consisting of one year's subscription to the *Electrical World*, is awarded each year to that student from North or South Carolina graduating in the Department of Electrical Engineering who, in the opinion of the faculty of that department and as shown by his grades, has made the most progress in electrical engineering during his last year in college.

*The Tau Beta Pi Prize.* The North Carolina Gamma chapter of Tau Beta Pi, national honorary engineering fraternity, awards each year a suitable prize, such as an engineering handbook, to a sophomore student in engineering for outstanding scholastic achievement during the freshman year.

*The Phi Lambda Upsilon Prize.* Phi Lambda Upsilon, honorary chemical society, yearly awards a suitable prize to an outstanding junior who is majoring in chemistry. The recipient's name is inscribed on a plaque displayed in the Chemistry Library.

*The Pegram Chemistry Club Prize* is awarded in the spring of each year for scholarship in chemistry, physics, and mathematics. The prize consists of a one-year junior membership in the American Chemical Society and a one-year subscription to either the *Journal of the American Chemical Society* or *Industrial and Engineering Chemistry*. To qualify for this prize, the student must (1) be enrolled as an undergraduate of Duke University and (2) be taking or have taken a fourth-year chemistry course. The winner of this prize is selected by a committee consisting of at least one faculty member and at least two members of the Pegram Chemistry Club; the selection is based on the quality-point average for all courses taken in chemistry, physics, and mathematics. In case of a tie equal awards are given.

*The Sigma Xi Prize.* The Society of the Sigma Xi, honorary scientific society, is devoted to the encouragement of scientific research, and seeks to stimulate those who show promise of accomplishment in scientific research. As an encouragement to younger men and women the Duke Chapter of Sigma Xi has established the following prizes to be awarded annually to students resident at Duke University: \$20.00 for an undergraduate project or paper, \$20.00 for a Master's

thesis or its equivalent, and \$40.00 for a Ph.D. dissertation or its equivalent. Nominations, recommendations, copies of theses, reports or other material must be in the hands of the Secretary of the Chapter on or before May 5.

*The Erasmus Club Prize in the Humanities.* The Erasmus Club, founded in 1925, a group of Duke faculty members interested in research in language, literature, and the arts, seeks to stimulate interest and study in these fields. To encourage Duke students in this field, the Erasmus Club has established an annual prize, amounting to \$25.00, for the best original essay by an undergraduate which embodies the results of research, criticism, or evaluation in some subject in the humanities. Prospective competitors should consult some members of the faculty, preferably their major professor. Essays must be typewritten and must be submitted to the president of the club before the first of April. The club reserves the right to withhold the prize in case there are no essays of acceptable quality.

*The Anne Flexner Memorial Award in Creative Writing* has been established by the friends of the family of Anne Flexner, who graduated from Duke in 1945. It consists of fifty dollars in cash and a book bearing the Anne Flexner Memorial Award bookplate. It is given annually for the best pieces of creative writing submitted by a Duke undergraduate. It is limited to short stories (5,000-word limit), one-act plays (5,000-word limit), poems (100-line limit), and informal essays (3,000-word limit). Only one manuscript may be submitted by a candidate, and manuscripts must be delivered to the English Office, Room 2G5, West Duke, before April 15.

*The William Senhauser Prize* is given by his mother in memory of her son, a member of the Class of 1942, who lost his life in the Pacific Theatre of War on August 4, 1944. The award is made annually to the sophomore or junior in Trinity College or the College of Engineering who has made the greatest contribution through participation and leadership in intramural sports. The winner of this prize is chosen by a committee selected by the President of the University.

The *Friends of Duke University Library* offer three prizes of \$25.00, \$15.00, and \$10.00, in an annual contest open to all undergraduate students for the best book collections acquired during their college years. The contest is supervised by the Undergraduate Committee of the Friends of the Library, which announces each fall the terms of the award. Inquiries may be directed to the Curator of Rare Books. Collections entered in the contest are exhibited each spring in the General Library, and the prizes are awarded on the basis of the student's collection and a personal interview to determine the overall planning and objectives of his collecting activity, and his familiarity with his own books and the general field of his collecting interest.

# University Lectures



**THE AVERA BIBLE LECTURES:** The Avera Bible Fund was established in 1897 in honor of the late W. H. Avera by his wife, who donated \$2,500 for this purpose. The income from this amount is used to establish a lectureship and to provide a collection of books on Biblical Literature.

**JOHN MCTYEIRE FLOWERS LECTURES:** The John McTyeire Flowers Lectures, established by the late B. N. Duke as a memorial to John McTyeire Flowers, a young alumnus of Trinity College who died in the Far East in 1905, were inaugurated in 1921.

**UNIVERSITY LECTURE SERIES:** The University Series of Lectures is given each year. These lectures are under the supervision of the Committee on Public Lectures of the Faculty.

**FOUNDERS DAY:** In commemoration of the signing by the late James B. Duke, on December 11, 1924, of the Indenture of Trust creating the Duke Endowment, under which Trinity College was expanded into Duke University, appropriate exercises are held on Founders Day at the University. Various local alumni groups celebrate the anniversary in connection with their annual meetings, some of which are held on December 11 but most of which take place on other dates during the autumn.

# Alumni Organizations



**GENERAL ALUMNI ASSOCIATION:** The Alumni Association of Duke University is composed of the former students of Duke University and its predecessor, Trinity College. The Association gives its annual dinner at Commencement, at which time the annual business meeting of the Association is held.

**GENERAL ALUMNAE ASSOCIATION:** The Alumnae Association of Duke University is composed of the women graduates and former students of Duke University and its predecessor, Trinity College. The Association joins with the Alumni Association in the annual dinner at Commencement. The annual business meeting is held during Alumnae Week End.

**DUKE UNIVERSITY NATIONAL COUNCIL:** The Duke University National Council is a working body for the alumni interests and efforts to advancing the welfare of Duke University by all appropriate means. Two meetings are held each year, one at Commencement and the other in the fall. The Council is composed of representatives from the various classes, local associations, students, faculty, parents, representatives at large, honorary members, officers of the General Alumni and Alumnae Associations, and representatives from the alumni and alumnae organizations of the professional schools.

**ALUMNAE COUNCIL:** The Alumnae Council was established by the General Alumnae Association in 1925. As the working organization of the group which established it, the Council endeavors to bind more closely the alumnae and the University and to advance the interests and aims of Duke University.

**THE ALUMNI OFFICE:** The General Alumni Office was organized to promote the work of the local alumni and alumnae associations and to co-ordinate the various activities of the General Alumni and Alumnae Associations and the Duke University National Council and Alumnae Council. Eighty county and local alumni associations have been formed in North Carolina and other states.

**THE ALUMNI REGISTER OF DUKE UNIVERSITY:** *The Alumni Register* of Duke University is a monthly magazine published by the Alumni Association in the interest of the alumni and the Uni-

versity. It aims to keep the alumni in touch with one another and with the University.

THE ALUMNI NEWS: *The Duke University Alumni News* is sent to all alumni four times during the year.

## Bureau of Public Information



The Bureau of Public Information is the official news agency of the University in the Department of Public Relations, and all University news emanates from this office. The Bureau maintains the University's relationship with the press and radio, and interprets the University—its faculty, its research and achievement—to the public via these media.

The Bureau also maintains individual biographical files on all faculty members and students, as well as files on all University departments and activities. Its files of clippings form a rich source of historical information of the Institution's life. In addition, the Bureau is a source of information for the many inquiries about Duke University which are received daily from all sections of the nation and from abroad.



# Gifts and Bequests



DUKE University derives its principal support from endowment funds and from miscellaneous gifts and grants. Permanently invested capital funds enable the University to offer to students academic and professional training at a fraction of its actual cost. The effectiveness of the University is determined to a large extent by its financial resources.

Gifts and bequests devoted to the improvement of the work of the University will be received and administered by the trustees in accordance with the desires of the donor.

**GIFTS.** Any kind of property, real or personal, may be the subject of a gift and only such form as is required to pass title is necessary. If the gift consists of real property, the title will be passed by deed; if it consists of cash or unregistered bonds, the gift is consummated by delivery of the property; or if stocks, by delivery of properly endorsed stock certificates. Unless restricted, the use of gifts is at the discretion of the Board of Trustees. Usually the proceeds, conservatively invested, are added to the permanent endowment of the University. The donor may, however, restrict the use of any gift and designate definitely the objects for which it shall be used. In such cases, the transfer of property would be accomplished by a letter or other documents describing in detail the objects for which the proceeds of the gift are to be used and when accepted by the University the term or conditions set out therein become binding upon it.

**BEQUESTS.** Bequests may be made to the University by an appropriate clause inserted in a will by codicil to a will already drawn. The following forms will serve as appropriate clauses for wills or codicils:

## GENERAL

I give (devise; if real property) and bequeath to Duke University, a corporation existing under the laws of the State of North Carolina and located in the City and County of Durham, State of North Carolina, and its successors forever, the sum of ..... dollars (or otherwise describe the gift) for the general purposes and uses of the University at the discretion of the Board of Trustees.

## SPECIFIC

I give (devise; if real property) and bequeath to Duke University, a corpora-

tion existing under the laws of the State of North Carolina and located in the City and County of Durham, State of North Carolina, or its successors forever,

the sum of ..... dollars (or otherwise describe gift) and direct that the income therefrom shall be used for the following purposes, viz. (here describe in detail the use desired).

#### CODICIL

Having hereinbefore made my last Will and Testament dated .....

....., and being of sound mind, I hereby make, publish, and declare the following codicil thereto; (here insert clause in same form as if it had been included in body of Will). Except as hereinbefore changed, I hereby ratify, confirm and republish my said last Will and Testament.



# THE GRADUATE SCHOOL OF ARTS AND SCIENCES

Fall Semester begins September 20, 1951

Spring Semester begins January 30, 1952

# Admission



**TO GRADUATE SCHOOL.** A student who has received the A.B. or B.S. degree after a four-year program at an accredited institution may be admitted to the Graduate School. Ordinarily he must have made in his undergraduate work an average of not less than "B," or the equivalent, and he must not have concentrated excessively in one field of study to the detriment of a rounded program. He should have met substantially the requirements for the A.B. or B.S. degree at Duke University.

Before admission can be granted, the student must submit for appraisal the following documents: (a) An official transcript of all his college or graduate work, to be forwarded directly from the Registrar of his college to the Dean of the Graduate School at Duke University. (b) Three letters of recommendation, to be furnished by persons best qualified to judge the applicant as a prospective graduate student. Scores on the Graduate Record Examination are required before full admission can be granted. If possible, the student should take all three phases of this examination well in advance of his intended registration. Arrangements can usually be made through officials of the student's college, or by correspondence with the Educational Testing Service, 20 Nassau Street, Princeton, New Jersey. Should a student be unable to take the examination before the final admission date, he may—if his other documents are acceptable—be granted "provisional" admission until he takes the examination, which he must arrange to take at the first time it is offered after his "provisional" admission.

**APPLICATION PROCEDURE.** In order to make formal application to the Graduate School, the student should address the Dean of the Graduate School, Duke University, requesting official application blanks. These should be filled out fully, in duplicate, and returned at the earliest moment. The other documents needed to complete the application, namely, transcripts, letters of recommendation, and Graduate Record Examination scores, must be forwarded directly from the institutions or individuals to the Dean of the Graduate School. In no case will such documents be accepted from the student.

The application and all supporting documents must be submitted to the Dean of the Graduate School not later than August 1 by those applying for the fall semester, or January 1 by those applying for the spring semester. Applications received later than these dates can-



not be accorded the same review or consideration as those received earlier. It is the student's responsibility to make certain that his application is complete and in order before the dates specified.

When the application is accepted and approved, the student will receive a letter of admission, giving the date by which he must notify the Dean of the Graduate School of his intention to enroll for the term for which he is granted admission.

Admission, once granted, is valid only for the term or year specified. Should a student be unable to enter the Graduate School at that time but wishes later to be admitted to a subsequent term, he must re-apply for admission, following the usual procedure. But he need only bring his application up to date, if he re-applies within two years of the date when he was first admitted.

### *Registration*

Once the student has received notification of his admission to the Graduate School, but not until then, he may present himself for registration. During the registration periods, announced in the *Bulletin*, he first confers with the Director of Graduate Studies of his major department, who consults with him and prepares an Approval Card, listing the course work to be taken during the semester. The student then presents this Approval Card to the Graduate School representatives in the registration line, who enroll him officially in his courses.

**WHO MUST REGISTER.** (1) All students who enter course work or residence for credit; (2) all students who have completed minimum requirements for the Ph.D. degree, but are using in their research the facilities of the University; (3) all students who wish merely to "audit" a course or courses.

**LATE REGISTRATION.** All students are expected to present themselves for registration at the time stated in the *Bulletin*. *Those registering after the close of the announced registration period will be charged a late registration fee of five dollars.*

**ADMISSION TO CANDIDACY.** Admission to the Graduate School (outlined above) must not be confused with *admission to candidacy* for a degree. No student can be considered a candidate for the A.M. degree until he has received the approbation of the major department and has successfully completed a minimum of 12 semester hours of graduate courses at Duke.

After completing these, he may apply (on an official blank for that purpose) for admission to candidacy. Two conditions must have been fulfilled: (1) he must have received passing grades on all of his 12 semester hours, and (2) he must have received a grade of "G" (good) on at least 3 of the 12 semester hours for which he was enrolled.

# Degrees Offered by the Graduate School



THE Graduate School of Arts and Sciences now offers the following degrees: The Master of Arts (A.M.), The Master of Education (M.Ed.), The Doctor of Philosophy (Ph.D.), and The Doctor of Education (Ed.D.).

## *The Master of Arts Degree*

**UNDERGRADUATE PREREQUISITE.** As a prerequisite to graduate study in his major subject, the student must have completed a *minimum* of 12 semester hours of approved college courses in that subject, and 12 additional semester hours in that subject or in related work. Since some departments require more than 12 semester hours, the student should read carefully the special requirements listed by his major department, which are included as headnotes to the course offerings in the *Bulletin*.

**LANGUAGE REQUIREMENTS.** The candidate for the A.M. degree must have a reading knowledge of at least one foreign language. (The several departments reserve the right to specify which foreign languages are acceptable.) Evidence of such knowledge may be furnished in either of two ways: (1) by successfully passing an examination, officially conducted by the appropriate foreign language department at Duke University, or (2) by a transcript showing the completion of the third college year of one language, or the second college year of each of two acceptable foreign languages.

If the student must take the examination to satisfy this requirement, he may request—should he feel well qualified—the language examination required of candidates for the Ph.D. degree. By passing this examination, he may satisfy the requirements in this particular language for both degrees at one time.

**MAJOR AND MINOR SUBJECT.** In his graduate work, the student, in order to complete the course requirements for the A.M. degree, must present acceptable marks for a minimum of 24 semester hours of graduate courses. Of these, at least 12 semester hours must be in the major subject.

Outside of his major, the student must take a minimum of 6 semester hours in a minor subject, the department of the minor to be approved by his major department. The remaining 6 semester hours of the necessary 24 may be taken in either of these departments, or in another approved by the major department and by the Graduate School Council. In addition to these he must present a thesis, which carries a credit of 6 semester hours. Thus, his earned credit for the degree totals a minimum of 30 semester hours.

**RESIDENCE REQUIREMENTS.** The candidate for the Master of Arts degree must spend, as a *minimum*, one full academic year in residence at Duke University. Often more time will prove necessary, depending upon the nature of the student's research problem and upon the student himself. Students who earn more than 15 semester hours in Summer Sessions must meet a minimum residence requirement of thirty-three weeks (represented by a credit of thirty-three semester hours).

**TRANSFER OF CREDITS.** Under certain circumstances a maximum credit of 6 semester hours may be allowed for graduate courses completed elsewhere. The acceptance of credit up to this amount, however, will not reduce the minimum period of full-time registered residence at Duke University.

With the approval both of the student's major department and the Dean of the Graduate School, a student who is granted such transfer credit may be permitted to register for as much as 12 semester hours of thesis research instead of the usual 6 semester hours. Or he may be permitted to fill out his schedule with as much as 6 semester hours of further undergraduate training or 6 semester hours of required language courses on the undergraduate level. In no case will credit be allowed for extension or correspondence courses.

**TIME LIMITS FOR COMPLETION OF THE A.M. DEGREE.** The candidate for the A.M. degree must complete all of his course requirements and the thesis within a period of six calendar years from the date of his initial registration. Credits earned over a longer period of time cannot be credited toward a degree.

**THE THESIS FOR THE A.M. DEGREE.** The thesis for the A.M. degree should essentially demonstrate the student's ability to collect, arrange, interpret, and report pertinent material on his special research problem. Although a publishable document is not required, the thesis must be written in a literate style, and should exhibit the student's competence in scholarly methods and procedures.

**REGULATIONS AND PROCEDURES.** On or before November 15 of the academic year in which it is expected the degree will be conferred, the student must file with the Dean of the Graduate School, on the official form, the title of the thesis. This title must have the

approval of the Director of Graduate Studies in the major department, and of the professor under whose direction the thesis will be written.

The student who completes all his work for the degree and who expects to receive it at the regular commencement exercises in June, must so notify the Graduate School office before the March 15 preceding.

Four bound, typewritten copies of the thesis must be submitted, in approved form, to the Dean of the Graduate School on or before May 1 preceding the June commencement at which the degree will be conferred. The copies will then be distributed to the several members of the examining committee.

**THE EXAMINING COMMITTEE AND THE EXAMINATION.** After consultation with the professor who has directed the thesis, the Dean of the Graduate School appoints an examining committee composed of the director of the thesis and two other members of the Graduate Faculty.

The candidate appears before this committee for examination, which usually is restricted to the thesis and to the major field, and which lasts for about one and one-half hours.

If the candidate successfully stands his examination, the examining committee certifies to his passing by signing the title page of the thesis. The candidate then returns the original and one carbon copy of the thesis to the Dean of the Graduate School, who deposits them in the University Library.

### *The Master of Education Degree*

**PREREQUISITE.** The degree of Master of Education is granted ordinarily only to teachers or to others engaged in educational work.

Before a student is admitted to graduate study for this degree, he must have completed, on the undergraduate level, a minimum of 18 semester hours of approved work in education, including courses in Educational Psychology, and courses in the History of Education, Educational Sociology, or School Administration.

Early in the program of his work, the student must successfully pass two examinations: (1) a test of general ability, and (2) a test designed to determine his ability to write acceptable English. The student, before the degree is conferred, must also present evidence testifying to at least two years of teaching experience, gained either before his admission to course work, or concurrently with it.

**REQUIREMENTS FOR THE DEGREE.** The M.Ed. degree may be earned either with or without the presentation of a thesis:

**WITHOUT THESIS:** Students who elect this plan must present a total of 30 semester hours of credit (those who take courses only in Summer Sessions must present 33 semester hours). Twelve hours of



this required work must include the *four* basic courses: Education 204, 210, 217, and 235. If a student, by examination, can demonstrate his competency in the subject matter of two of these courses, he may be granted exemption from the required work in these courses. In no case may he claim exemption for more than two.

Other requirements are: a departmental major (i.e., in Nursing Education, Elementary Education, Public School Administration, Public School Supervision, or Secondary Education) of at least 12 semester hours, and a minor of at least 6 semester hours in a department other than Education. Toward the end of his residence the student must pass a comprehensive examination on his departmental major and on the content of the four basic courses. Permission to take such examinations must be obtained from the Director of Graduate Studies of the Department of Education, and a notice of intention must be filed with him at least three weeks before the announced dates of the examination.

**WITH THESIS:** Students who elect this plan are permitted to substitute a thesis for 6 semester hours of the required course work (30 in winter; 33 in Summer Sessions). The first 15 semester hours (12 in the Summer Session) must be passed with a grade of "G" (good) on at least 6 semester hours, and with no grade below an "S." The student must also present a thesis subject approved by the Professor of Education who intends to direct it, and by two other members of the staff in Education, including the Director of Graduate Studies. Two of the three members of the approving committee must be permanent members of the Duke University Graduate Faculty. The title of the thesis must be filed with the Dean of the Graduate School at the same time as the titles for the A.M. theses.

In addition to the thesis, the student must present at least 24 semester hours of course credit (27 in Summer Session). Of these, 6 semester hours must be earned in *two* of the basic courses in the Department; Education 204, 210, 217, or 235. Of the remaining 18 or more semester hours, 6 semester hours must constitute a minor taken outside of the Department of Education; at least 12 semester hours must be taken in the student's departmental major.<sup>1</sup>

The examination on the thesis is similar to that for the Master of Arts degree.

All of the work in fulfillment of the requirements for the M.Ed. degree, whether done in Summer Sessions or in the regular academic year, must be completed within a period of six calendar years from the date of beginning.

<sup>1</sup> Those who expect to attend Summer Sessions should consult the statement elsewhere in this Bulletin, regarding course requirements.



## *The Doctor of Philosophy Degree*

The Ph.D. degree is essentially a research degree. Although course work is a necessary part of the student's program, the mere accumulation of course credits will not be sufficient for attaining this degree. The granting of the Ph.D. is based primarily upon the student's knowledge of a specialized field of study and upon the production of an acceptable dissertation embodying the results of original research.

Before undertaking a program of advanced work toward the Ph.D., he should consult with the Dean of the Graduate School or the Director of Graduate Studies in his major department to determine the possibility of securing necessary instruction and supervision of research in his field of specialization.

**REQUIREMENTS FOR THE PH.D. DEGREE.** The formal requirements, discussed in detail below, for the Ph.D. degree are as follows: (1) foreign languages; (2) major and minor courses; (3) supervisory committee for program of study; (4) residence; (5) preliminary examination; (6) the dissertation; (7) the final examination.

**FOREIGN LANGUAGES.** Normally, a reading knowledge of both French and German is required. Such knowledge is evidenced by the passing of an examination conducted by the appropriate language department at Duke University, in cooperation with the student's major department.

With the permission of the major department, and with the approval of the Dean of the Graduate School, a student may be allowed to substitute for either of these another language which has a definite relation to the candidate's program of work for the Ph.D. degree. By rule of the Graduate Council, language examinations must be passed before a student takes his preliminary examination. Some departments require the student to master these languages early in the graduate program.

**MAJOR AND MINOR.** The student's program of study necessarily demands substantial concentration on courses in his major department. Enough work must be taken in one department other than the major department to constitute an acceptable minor. Exceptions which permit both the major and minor within the same department are allowed only by the special permission of the Dean of the Graduate School.

**COMMITTEE TO SUPERVISE THE PROGRAM OF STUDY.** Ordinarily, during the student's third semester of graduate work a supervisory committee of five members is appointed by the Dean of the Graduate School. This committee, with the professor who is to direct the student's research serving as chairman, formulates the program of study, which is submitted to the Dean of the Graduate School

for his approval. Of the five members, one must be from a department (usually the minor) other than the major department. This committee, with occasional necessary changes, serves also as the examining committee for both the preliminary and the final Ph.D. examinations.

**RESIDENCE.** The normal period of residence is not less than three full academic years beyond the B.A. or B.S. degree. A student who already has his A.M. degree may be allowed one year of residence for it, and thus will need to spend a minimum of two additional years in residence.\* In unusual cases, a student who has spent the first two years in residence at Duke University may be allowed to take his third year of residence at some other accredited institution. This can be done only with the approval of the major department and of the Dean of the Graduate School. It should be understood that either the first two years or the last year must be spent in actual residence at Duke. Occasionally, because of undergraduate deficiencies, a student may need to spend additional time beyond the minimum residence in preliminary courses, for which he will not receive residence credit, as a background for certain aspects of his graduate program.

Except in unusual cases, graduate work of fragmentary character taken over a long period of years, or work completed many years before the student becomes a candidate for the degree at Duke University, will not be accepted as satisfying the requirements of residence.

**CREDIT FOR SUMMER WORK.** Credit for a maximum of one year's residence may be granted for work completed in Summer Sessions with the approval of the major department and of the Dean of the Graduate School. A full schedule of summer courses, carried for six weeks, constitutes one-fifth of a year's residence credit.

**PRELIMINARY EXAMINATION.** Near the end of the second academic year of graduate work (or in special cases early in the third year) the student must take his preliminary examination, which ordinarily covers the field of both his major and minor. Conducted by his Supervisory Committee, the examination is oral, or written, or both, as determined by the Committee. *Upon passing this examination, and not until then, the student is accepted as a candidate for the Ph.D. degree.* Transfer students who may already have passed a preliminary examination at another university must nevertheless take the examination at Duke.

**PRIVILEGE OF RE-EXAMINATION.** Should the student fail the preliminary examination, he may apply, with the consent of his Supervisory Committee and of the Dean of the Graduate School, for the privilege of a second examination to be taken no sooner than six months after the date of the first. Failure on the second examination

\* Rules regarding transfer of graduate credit are given elsewhere in this Bulletin.

will render the student ineligible to continue his program for the Ph.D. degree at Duke University.

**THE DISSERTATION.** The dissertation is expected to be a mature and competent piece of writing, embodying the results of significant and original research. It must be, in essence, a contribution to knowledge.

The subject for the dissertation must receive the written approval of both the Director of Graduate Studies of the student's major department and of the professor who directs the dissertation. The title of the dissertation must be filed with the Dean of the Graduate School on or before October 15 preceding the June commencement at which the degree is expected to be conferred.

The dissertation must be completed to the satisfaction of the professor who directs it; and four bound, typewritten copies in approved form must be deposited with the Dean of the Graduate School on or before April 15 if the degree is to be granted at the June commencement following.

The dissertation must be typed on standard paper specified by the Graduate Council and bound in approved form. The form of the title page must be approved by the major department and by the Dean of the Graduate School.

At the end of each of the four bound copies should be included a biographical sketch of the author of the dissertation.

After the final examination the original and the first carbon copy of the finally approved dissertation are returned to the Dean of the Graduate School, who deposits them in the University library.

**DISSERTATION FEE AND PUBLICATION REQUIREMENT.** The candidate must deposit not later than the May 1 before the degree is conferred, with the Treasurer of the University, a dissertation fee of \$50.00. Should the dissertation be published in a form satisfactory to the professor under whom it was written, and to the Dean of the Graduate School, within a period of three years from the date of the degree, the deposit fee will be returned to the student.

Ten copies of each published dissertation must be deposited with the Dean of the Graduate School, as provided by the regulation of the Graduate School Council. A suitable abstract of one or more articles in published form may be accepted as satisfying the publication requirements. Ten copies of each of these must be deposited with the Dean of the Graduate School.

If the dissertation is not published within a three-year period under the conditions stated above, the deposit fee is forfeited and is credited to a Special Dissertation Fund, which is used for subsidizing the publication of such dissertations as are recommended by the Graduate School Council.

**FINAL EXAMINATION.** The final oral examination covers the dissertation and the related subject matter in major and minor fields. Normally, one year must elapse between the dates of the preliminary and the final examinations.

If a student fails his final examination, he may be allowed to take it for a second time, but not sooner than six months from the date of his first. Permission to take the second examination must be obtained from the professor who directed the dissertation and from the Dean of the Graduate School. Failure to pass the second examination renders the student ineligible to continue work for the Ph.D. degree at Duke University.

### *The Doctor of Education Degree*

The Doctor of Education is a professional degree and is granted only to those who are, or intend to become, public school administrators.

**ADMISSION.** The candidate for the Ed.D. degree must meet the same requirements for admission to the Graduate School as the candidate for the Ph.D. degree. In addition to these uniform requirements, the candidate for the Ed.D. (1) must have had at least three years of experience in public school work, preferably in school administration; (2) must make a satisfactory mark on a psychological examination, and demonstrate, by examination, his ability to write good English; (3) must present strong letters of appraisal and recommendation from persons well qualified to speak with authority of his abilities; and (4) must present himself, if possible, for a personal interview. The Standing Committee on the Ed.D. degree reserves the right to insist upon an interview.

**RESIDENCE.** The residence requirements for the Ed.D. degree are the same as those for the Ph.D.

**ACCEPTABLE MARKS ON FIRST YEAR'S WORK.** In order to be considered for candidacy for the Ed.D. degree, the student must have passed all of his course work in the first year of graduate study; on at least 9 semester hours he must have made a grade of "G" or better.

**PRELIMINARY EXAMINATION.** By the end of his second year of residence the candidate for the Ed.D. degree will take a preliminary examination similar in scope to that described for the Ph.D. degree. Only after he passes this examination, will he be considered a candidate for the degree.

**DISSERTATION AND FINAL EXAMINATION.** The candidate must write a dissertation which demonstrates his ability to in-



investigate and report on some significant phase of public school administration. The details of dissertation presentation, including its defense in a final examination, are the same as those for the Ph.D. degree.

**AWARDING OF THE DEGREE.** After the completion of the formal academic requirements for the Ed.D. degree, the candidate must devote at least one year of apprenticeship in a public school system, under conditions which assure appropriate supervision of the candidate's activities. The Standing Committee on the Ed.D. degree will decide the adequacy of this training. The degree will not be formally awarded until after the successful completion of this apprenticeship.

**PROGRAM OF WORK.** The details of the program of work are determined for each candidate by the Standing Committee for the Ed.D. degree. In general, the first year of work follows the program laid down for the M.Ed. degree. In the second and third years, work in Public School Administration is organized on the basis of seminars, rather than separate courses. This professional, specialized study accounts for about one-third of the course work. The other two-thirds is divided almost equally between the general field of Education and related work.

**MAJOR AND MINOR.** The major field is Public School Administration. The minor, or related work, amounting to at least 24 semester hours, must be taken in Economics, Political Science, or Sociology. Courses necessary for the student's program which lie outside these fields must receive the approval of the Standing Committee.

### *General Regulations*

**SIZE OF CLASSES.** Classes which carry graduate credit are limited in size to twenty-five students. In exceptional cases this regulation may be modified, but only by permission of the Executive Committee of the Graduate Council on the recommendation of the department concerned.

**GRADING OF GRADUATE STUDENTS.** Grades in the Graduate School are as follows: "E," "G," "S," "F," and "Inc." "E" (exceptional) is the highest mark. "G" (good) and "S" (satisfactory) are the remaining passing marks. "F" (failing) is below passing, and "Inc." (incomplete) indicates that some portion of the student's work is missing, for a satisfactory reason, at the time the grades are made out. The professor who gives an "Inc." specifies the date by which time the student must have made up the deficiency. In no case may an extension be granted beyond one calendar year from the date the



course ended. No residence credit can be granted for that portion of a student's program which lapses because of incomplete marks.

**CHARGE FOR REQUESTED TRANSCRIPTS.** A student who wishes to transfer his credits from Duke University to another institution is entitled to one free transcript of his record. A fee of one dollar, payable in advance, is charged for each additional copy.

**TRANSFER OF GRADUATE CREDITS.** Credit for graduate course work earned at another institution will be determined only after a student has spent one semester at Duke University. After completing his first semester, the student should file a request that his credits be reviewed and a decision made.

**WITHDRAWAL FROM GRADUATE SCHOOL.** If a student wishes to withdraw from the Graduate School, he should notify both the Director of Graduate Studies in his major department and the Dean of the Graduate School.

**GRADUATE CREDIT EARNED BEFORE A.B. DEGREE IS GRANTED.** Ordinarily no credit for graduate courses earned before a student has been awarded his A.B. or B.S. degree will be allowed. However, an undergraduate student at Duke University, who, at the beginning of a semester, lacks no more than 9 semester hours for fulfilling the requirements for the A.B. or B.S. degree, may obtain permission from the Dean of the Graduate School to enroll for graduate courses sufficient to bring his total program to fifteen hours a week. Such graduate courses will be credited toward the A.M. or M.Ed., provided that the student is duly registered in the Graduate School at the beginning of that term and that he meets the requirements for admission to the Graduate School.

### *Fellowships, Scholarships, and Assistantships*

For the encouragement and financial assistance of graduate students of high character and marked ability, Duke University has established a considerable number of fellowships, scholarships, and assistantships. The stipends for these range from \$450 to \$1,700. Holders of grants pay tuition and other fees regularly required of all graduate students.

For further details see the *Bulletin of the Graduate School of Arts and Sciences*.

### *Tuition, Fees and Expenses*

#### GENERAL FEES IN THE ACADEMIC YEAR

The following table shows the general fees and charges collected from all students. All fees for each semester are due and payable,

unless otherwise specified, at the time of registration at the beginning of that semester. No student is admitted to classes until arrangements have been made with the Treasurer of the University for the settlement of fees.

Tuition, per semester.....	\$175.00
General Fee,* per semester.....	60.00
Athletic Fee, not including Federal Tax, Optional, per semester.....	5.00
Room-rent—See detailed statement below.	

Special Dissertation Fee, payable by candidates for the Ph.D. degree, on or before the May 1 preceding the granting of the degree..... 50.00

\* General Fees, in lieu of most special charges, include the following fees: Matriculation, Medical, Library, Damage, Commencement, Diploma, and an average of the Laboratory and Materials Fees.

Due to rising costs it may be necessary to consider some readjustment of charges. In the event of an adjustment applicants will be notified.

### LIVING ACCOMMODATIONS

Rooms for men are provided in the Graduate dormitory on the West Campus; rooms for women, in Epworth on the East Campus. Food service on both campuses is cafeteria style. For more complete information, see the *Bulletin of the Graduate School*.

### ESTIMATED EXPENSES IN THE ACADEMIC YEAR

The necessary expenses of a graduate student are moderate. The University dormitories and Unions provide comfortable and wholesome living conditions at a minimum cost. Incidental expenses for recreation, traveling, clothes, and other items naturally depend on the tastes and habits of the individual. The table below lists the necessary college expenses for one year for a full program of work:

	<i>Low</i>	<i>Moderate</i>	<i>Liberal</i>
Tuition .....	\$350.00	\$ 350.00	\$ 350.00
General Fee .....	120.00	120.00	120.00
Room-rent .....	100.00	125.00	175.00
Board .....	350.00	400.00	450.00
Laundry .....	25.00	30.00	35.00
Books .....	22.50	30.00	45.00
	<hr/> \$967.50	<hr/> \$1,055.00	<hr/> \$1,175.00

### LIBRARIES AND RESEARCH FACILITIES

Graduate students have access to the General Library and the various school and departmental libraries. Such collections total 1,025,000 volumes, including many large and significant special collections. Science laboratories are large and well equipped for general and special research in botany, zoology, physics, chemistry, and

medicine. The Duke Forest of eight thousand acres provides a large practical laboratory for forest research. Through the University's co-operative sponsorship of the Oak Ridge Institute of Nuclear Studies, graduate students are able to use the facilities of the National Laboratories at Oak Ridge.

### *Graduate Study in the Summer Session*

Graduate students who wish to work toward advanced degrees in the Summer Session, particularly in Chemistry, Economics, Education, English, History, Mathematics, Religion, Sociology, Spanish, and Zoology will find a wide selection of courses offered by members of the Duke faculty and by visiting professors. Other departments ordinarily offering sequences of work leading to the A.M. degree are Botany, Political Science, and Psychology.

Students who wish to be admitted to the Graduate School for work in the Summer Session, should make application to the Dean of the Graduate School, as well as to the Director of the Summer Session, and should return the completed application, with supporting documents, before June 1, for admission to the first term, and before July 10 for admission to the second term.

# Courses of Instruction



In general, courses with odd numbers are offered in the first semester, those with even numbers in the second semester. The courses listed under the headnote to the several departments are those planned at the date of printing the Bulletin. Occasional changes may later be necessary.

This is a condensed description of courses. For a full description, see *Bulletin of the Graduate School*.

## AESTHETICS, ART, AND MUSIC

PROFESSOR KATHARINE GILBERT, CHAIRMAN—100 ASBURY BUILDING; ASSISTANT PROFESSOR MARKMAN

No graduate degree is offered in this department, but the following courses are suggested as possible minors for students majoring in history, literature, philosophy, religion, psychology, or sociology, or in any other interested departments. In 1951-52 the courses planned are 201-202, 215 and 216.

- |   |                             |
|---|-----------------------------|
| 201-202. THE PHILOSOPHY OF ART.—6 s.h.              | PROFESSOR GILBERT           |
| 218-214. HISTORY OF AESTHETICS.—6 s.h.              | PROFESSOR GILBERT           |
| 217. RELIGIOUS ART OF THE ANCIENT NEAR EAST.—3 s.h. | ASSISTANT PROFESSOR MARKMAN |
| 216. RELIGIOUS ART OF THE CLASSICAL WORLD.—3 s.h.   | ASSISTANT PROFESSOR MARKMAN |
| 217. AEGEAN ART.—3 s.h.                             | ASSISTANT PROFESSOR MARKMAN |
| 218. EARLY GREEK ART.—3 s.h.                        | ASSISTANT PROFESSOR MARKMAN |

## DIVISION OF ANCIENT LANGUAGES AND LITERATURES

PROFESSORS CLARK, ROGERS, AND STINESPRING; ASSISTANT PROFESSORS BROWNLEE, ROSE, TRUESDALE, AND WAY

### FOR SENIORS AND GRADUATES

- |  |                               |
|--|-------------------------------|
| 201-202. GREEK TRAGEDY.—6 s.h.                                   | ASSISTANT PROFESSOR TRUESDALE |
| 203-204. HOMER.— <i>Odyssey</i> . PINDAR AND BACCHYLIDES. 6 s.h. | ASSISTANT PROFESSOR TRUESDALE |
| 205-206. GREEK HISTORIANS.—6 s.h.                                | ASSISTANT PROFESSOR ROSE      |
| 207-208. GREEK ORATORS.—6 s.h.                                   | ASSISTANT PROFESSOR WAY       |
| 209-210. PLATO.—6 s.h.   | ASSISTANT PROFESSOR WAY       |
| 211-212. ARISTOPHANES.—6 s.h.                                    | ASSISTANT PROFESSOR TRUESDALE |
| 243. ATHENIAN TOPOGRAPHY.—3 s.h.                                 | ASSISTANT PROFESSOR WAY       |
| 244. GREEK EPIGRAPHY.—3 s.h.                                     | ASSISTANT PROFESSOR WAY       |
| 245. GREEK DIALECTS.—3 s.h.                                      | ASSISTANT PROFESSOR WAY       |
| 246. GREEK HISTORICAL INSCRIPTIONS.—3 s.h.                       | ASSISTANT PROFESSOR WAY       |
| 247-248. GREEK ARCHAEOLOGY.—6 s.h.                               | ASSISTANT PROFESSOR WAY       |

257. SOCIAL AND CULTURAL HISTORY OF THE HELLENISTIC WORLD  
FROM ALEXANDER TO AUGUSTUS.—3 s.h. PROFESSOR ROGERS

FOR GRADUATES

The more advanced work of the graduate department is done in the seminar. One author or group of authors forms the center of study each year. Seminars are offered in ARISTOPHANES (301-302), THE GREEK HISTORIANS (303-304), THE ATTIC ORATORS (305-306), and THE GREEK TRAGIC POETS (307-308). These run through a cycle of four years.

---

*Graduate students of Duke University may attend the American School of Classical Studies in Athens, Greece, without charge for tuition, and they are eligible to compete for the fellowships that are offered annually by the School. These consist of two fellowships in Greek archaeology, and one in the language, literature, and history of ancient Greece, each with a stipend of \$2,000. They are awarded mainly on the basis of examinations held in the beginning of February of each year.*

LATIN AND ROMAN STUDIES

FOR SENIORS AND GRADUATES

201. ROMAN FICTION.

202. LATIN CHRISTIAN WRITERS.

203-204. ROMAN EPIC: ENNIUS, VERGIL, MANILIUS, LUCAN, FLACCUS,  
STATIUS, SILIUS.—6 s.h.

205-206. ROMAN DRAMA: PLAUTUS, TERENCE, SENECA.—6 s.h.

207-208. ROMAN PHILOSOPHY.

209-210. VULGAR LATIN: INTRODUCTION TO ROMANCE PHILOLOGY.

211-212. ROMAN ORATORY.—6 s.h.

PROFESSOR ROGERS

215. INTRODUCTION TO ROMAN ART AND ARCHEOLOGY.

216. TOPOGRAPHY AND MONUMENTS OF ANCIENT ROME.

251-252. ROMAN LIFE.

258. SOCIAL AND CULTURAL HISTORY OF THE GRAECO-ROMAN  
WORLD.—3 s.h. PROFESSOR ROGERS

281-282. ROMAN HISTORICAL LITERATURE.

283-284. ROMAN LAW.—6 s.h.

PROFESSOR ROGERS

FOR GRADUATES

309-310. SIGHT READING AND COMPOSITION.—6 s.h.

ASSISTANT PROFESSOR ROSE

311-312. LATIN EPIGRAPHY.—6 s.h.

PROFESSOR ROGERS

SEMINARS: CATULLUS (301-302), ROMAN HISTORIANS (331-332), ROMAN  
PROVINCIAL ADMINISTRATION (341-342), THE REIGN OF TIBERIUS  
(343-344), MARTIAL (351-352), HORACE (361-362), LUCRETIUS (371-372), and  
CICERO'S PUBLIC CAREER (391-392).

LINGUISTICS

FOR GRADUATES

375-376. GREEK AND LATIN LINGUISTICS.—6 s.h. ASSISTANT PROFESSOR ROSE

385-386. ELEMENTARY SANSKRIT.—6 s.h.

ASSISTANT PROFESSOR ROSE



## SEMITICS

The courses planned for 1951-52 are 201-202, 207-208, 305, 309.

## FOR SENIORS AND GRADUATES

201-202. FIRST HEBREW.—6 s.h. PROFESSOR STINESPRING

205-206. ELEMENTARY ARABIC.—6 s.h. PROFESSOR STINESPRING

207-208. SECOND HEBREW.—6 s.h. ASSISTANT PROFESSOR BROWNLEE

## FOR GRADUATES

304. ARAMIC.—3 s.h. PROFESSOR STINESPRING

305. THIRD HEBREW.—Hours to be arranged. 3 s.h. PROFESSOR STINESPRING

307. SYRIAC.—3 s.h. PROFESSOR STINESPRING

309. HISTORY OF THE ANCIENT NEAR EAST.—3 s.h. PROFESSOR STINESPRING

## RELATED COURSES IN OTHER DEPARTMENTS

Philosophy 217, Religion 217, 218, 220, 313, 316, 318.

Under the terms of a co-operative agreement graduate students of Duke University may, with the approval of the chairman of their major department, take any graduate course offered by the Departments of Greek and Latin of the University of North Carolina by the payment of a nominal fee. A list of these courses will be sent upon request.

## BOTANY

PROFESSOR BLUMQUIST, CHAIRMAN—203 BIOLOGY BUILDING; PROFESSOR KRAMER,  
DIRECTOR OF GRADUATE STUDIES—04 BIOLOGY BUILDING; PROFESSORS

ADDOMS, HARRAR, OOSTING AND WOLF; ASSOCIATE

PROFESSORS ANDERSON AND PERRY; AND

DR. WARREN

## FOR SENIORS AND GRADUATES

202. GENETICS.—Prerequisites: one year of botany, zoology, or equivalent, and college algebra. 4 s.h. ASSOCIATE PROFESSOR PERRY

203. PLANT CYTOLOGY.—Prerequisite: one year of botany. 4 s.h. ASSOCIATE PROFESSOR ANDERSON

204. ADVANCED PLANT ANATOMY.—Prerequisite: Botany 55 or equivalent. 4 s.h. PROFESSOR ADDOMS

216. BOTANICAL MICROTECHNIQUE.—Prerequisite: two semesters of botany. 4 s.h. ASSOCIATE PROFESSOR ANDERSON

221. STRUCTURE AND CLASSIFICATION OF FUNGI.—Prerequisite: two semesters of botany. 4 s.h. PROFESSOR WOLF

222. PHYSIOLOGY AND ECOLOGY OF FUNGI.—Prerequisite: Botany 221 or equivalent. 4 s.h. PROFESSOR WOLF

225-226. SPECIAL PROBLEMS.—Credits to be arranged.

(a) BACTERIOLOGY, MYCOLOGY, AND PLANT PATHOLOGY.

PROFESSOR WOLF AND DR. WARREN

(b) CYTOLOGY.

ASSOCIATE PROFESSOR ANDERSON

(c) ECOLOGY.

PROFESSOR OOSTING

(d) GENETICS.

ASSOCIATE PROFESSOR PERRY

(e) MORPHOLOGY AND ANATOMY OF HIGHER PLANTS.

PROFESSORS ADDOMS, HARRAR AND OOSTING

(f) MORPHOLOGY AND TAXONOMY OF LOWER GROUPS.

PROFESSOR BLUMQUIST AND ASSOCIATE PROFESSOR ANDERSON

(g) PHYSIOLOGY. PROFESSORS ADDOMS AND KRAMER

(h) PLANT MICROCHEMISTRY. PROFESSOR ADDOMS

(i) TAXONOMY OF HIGHER GROUPS. PROFESSOR BLOMQUIST

252. ADVANCED PLANT PHYSIOLOGY.—Prerequisite: Botany 151 or equivalent; organic chemistry recommended. 4 s.h. PROFESSOR KRAMER

255. ADVANCED TAXONOMY.—Prerequisite: two years of botany, including Botany 52 or equivalent. 4 s.h. PROFESSOR BLOMQUIST

256. FIELD ECOLOGY.—4 s.h. PROFESSOR OOSTING

#### FOR GRADUATES

305. PLANT GEOGRAPHY.—Prerequisite: Botany 156 or equivalent. 4 s.h. PROFESSOR OOSTING

310. STRUCTURE AND CLASSIFICATION OF BRYOPHYTES AND PTERIDOPHYTES.—4 s.h. PROFESSOR BLOMQUIST

311. STRUCTURE AND CLASSIFICATION OF ALGAE.—4 s.h. PROFESSOR BLOMQUIST

341. METHODS IN PLANT PHYSIOLOGY.—4 s.h. PROFESSOR KRAMER

342. PLANT MICROCHEMISTRY.—2 s.h. PROFESSOR ADDOMS

359-360. RESEARCH IN BOTANY.—Credits to be arranged.  
PROFESSORS ADDOMS, BLOMQUIST, HARRAR, KRAMER, OOSTING,  
WOLF; ASSOCIATE PROFESSORS ANDERSON AND PERRY

397-398. GENERAL BOTANICAL SEMINAR.—2 s.h.  
PROFESSORS ADDOMS, BLOMQUIST, HARRAR, KRAMER, OOSTING,  
WOLF; ASSOCIATE PROFESSORS ANDERSON AND PERRY;  
AND DR. WARREN

#### FOREST BOTANY

##### FOR SENIORS AND GRADUATES

224. FOREST PATHOLOGY.—Prerequisites: Botany 1 and 2. 4 s.h. PROFESSOR WOLF

253. DENDROLOGY.—Prerequisite: one year of botany. 3 s.h. PROFESSOR HARRAR

##### RELATED COURSES IN OTHER DEPARTMENTS

These related courses may be counted toward a major in botany.  
Forestry 257; Zoology 341.

## CHEMISTRY

PROFESSOR SAYLOR, EXECUTIVE OFFICER—115A CHEMISTRY BUILDING; PROFESSOR  
VOSBURGH, DIRECTOR OF GRADUATE STUDIES—211 CHEMISTRY BUILDING; PRO-  
FESSORS BIGELOW, GROSS, HAUSER, HOBBS, AND LONDON; ASSOCIATE  
PROFESSORS BRADSHAW, BROWN, AND HILL

##### FOR SENIORS AND GRADUATES

206. ELEMENTS OF THEORETICAL CHEMISTRY.—Prerequisites: Chemistry 70, 151-152, Physics 51-52 or 1-2 and Mathematics 6 s.h. 4 s.h. PROFESSORS SAYLOR AND HOBBS

215-216. ADVANCED INORGANIC CHEMISTRY.—Prerequisites: Chemistry 70, 151-152, and 261-262, or 206. 6 s.h. PROFESSOR VOSBURGH AND ASSOCIATE PROFESSOR HILL

233. INSTRUMENTAL ANALYSIS.—Prerequisites: Chemistry 70 and one year of physics. 2 s.h. PROFESSORS HOBBS, SAYLOR, AND VOSBURGH

234. PHYSICO-CHEMICAL METHODS OF ANALYSIS.—Prerequisites: Chemistry 70 and either 261-262 or 206; either of the latter may be taken concurrently. 2 s.h. PROFESSORS HOBBS, SAYLOR, AND VOSBURGH

236. THEORY OF ANALYTICAL CHEMISTRY.—Prerequisites: Chemistry 70 and 261-262. 1 s.h. PROFESSOR VOSBURGH

251. QUALITATIVE ORGANIC ANALYSIS.—Prerequisites: Chemistry 70 and 151-152. 2 or 3 s.h. PROFESSOR HAUSER

252. ADVANCED ORGANIC PREPARATIONS.—Prerequisite: Chemistry 151-152. 1 or 2 s.h. ASSOCIATE PROFESSOR BROWN AND PROFESSOR BIGELOW

253-254. ADVANCED ORGANIC CHEMISTRY.—Prerequisites: Chemistry 70 and 151-152. 4 s.h. PROFESSORS BIGELOW AND HAUSER

261-262. PHYSICAL CHEMISTRY.—Prerequisites: Chemistry 70, 151-152, Physics 51-52 or I-2 and Mathematics 51-52 or equivalent. 6 s.h. PROFESSORS HOBBS AND SAYLOR

265-266. CHEMICAL PHYSICS. STATISTICAL THEORY.—6 s.h. PROFESSOR LONDON

267-268. CHEMICAL PHYSICS. QUANTUM THEORY OF ATOMIC AND MOLECULAR STRUCTURE.—6 s.h. PROFESSOR LONDON

271. INTRODUCTION TO RESEARCH.—1 s.h. ASSOCIATE PROFESSOR BROWN

273-274.—SEMINAR.—2 s.h. PROFESSORS BIGELOW, GROSS, HAUSER, HOBBS, SAYLOR, AND VOSBURGH; ASSOCIATE PROFESSORS BRADSHIER, BROWN, AND HILL

275-276. RESEARCH.—3 or 6 s.h. PROFESSORS BIGELOW, GROSS, HAUSER, HOBBS, LONDON, SAYLOR, AND VOSBURGH; ASSOCIATE PROFESSORS BRADSHIER, BROWN, AND HILL

#### FOR GRADUATES

303. THERMODYNAMICS.—3 s.h. PROFESSORS SAYLOR AND VOSBURGH

304. PHYSICAL CHEMISTRY OF REACTIONS.—Prerequisite: Chemistry 261-262. 3 s.h. PROFESSOR HOBBS

350. ORGANIC REACTIONS.—Prerequisites: Chemistry 251 and 253. 2 s.h. ASSOCIATE PROFESSOR BRADSHIER

351-352. ADVANCED SYNTHETIC ORGANIC CHEMISTRY.—2 s.h. PROFESSORS BIGELOW AND HAUSER

363-364. ADVANCED PHYSICAL CHEMISTRY.—Prerequisites: Chemistry 261-262 and 303, or equivalent. 4 s.h. PROFESSORS HOBBS, SAYLOR, AND VOSBURGH; ASSOCIATE PROFESSOR HILL

#### RELATED COURSES IN OTHER DEPARTMENTS

##### Biochemistry and Nutrition

M241, M242, M341, M343-344, M349-350, M351-352; and Microbiology M322.

## ECONOMICS

PROFESSOR HOOVER, CHAIRMAN—320 LIBRARY; PROFESSOR SPENGLER, DIRECTOR OF GRADUATE STUDIES—322 LIBRARY; PROFESSORS BLACK, DE VYVER, HUMPHREY, RATCHFORD, SIMMONS, SMITH, AND VON BECKERATH; ASSOCIATE PROFESSORS HANNA AND LANDON

#### FOR SENIORS AND GRADUATES

204. ADVANCED MONEY AND BANKING.—3 s.h. PROFESSOR SIMMONS

215. ECONOMIC SYSTEMS.—3 s.h. PROFESSOR HOOVER

216. ECONOMIC FUNCTIONS OF THE STATE.—Prerequisite: Economics 215 or its equivalent. 3 s.h. PROFESSOR HOOVER

217. POPULATION PROBLEMS AND RESOURCES.—3 s.h.  
PROFESSOR SPENGLER
218. BUSINESS CYCLES.—3 s.h.  
PROFESSOR HUMPHREY
231. THE ECONOMIC HISTORY OF EUROPE.—3 s.h.  
PROFESSOR SMITH
233. STATE AND LOCAL FINANCE.—3 s.h.  
PROFESSOR RATCHFORD
234. FEDERAL FINANCE.—3 s.h.  
PROFESSOR RATCHFORD
236. TAXATION AND GOVERNMENT FINANCE.—3 s.h.  
PROFESSOR RATCHFORD
- 237-238. STATISTICAL METHODS.—Prerequisite: Economics 138 or consent of the instructor. 6 s.h.  
ASSOCIATE PROFESSOR HANNA
- 241-242. VALUE AND DISTRIBUTION.—6 s.h.  
PROFESSOR SPENGLER
245. PROBLEMS OF MODERN INDUSTRIALISM.—3 s.h.  
PROFESSOR VON BECKERATH
256. LABOR LEGISLATION.—3 s.h.  
PROFESSOR DE VYVER
260. SOCIAL INSURANCE.—3 s.h.  
PROFESSOR DE VYVER
265. INTERNATIONAL TRADE AND FINANCE.—3 s.h.
268. COMPETITIVE VERSUS MONOPOLISTIC ENTERPRISE.—3 s.h.  
PROFESSOR VON BECKERATH
- 275-276. ADVANCED INDUSTRIAL ACCOUNTING AND MANAGEMENT.—5 s.h.  
PROFESSOR BLACK

## FOR GRADUATES

304. SEMINAR IN MONEY AND BANKING.—3 s.h.  
PROFESSOR SIMMONS
- 311-312. HISTORY OF POLITICAL ECONOMY.—6 s.h.  
PROFESSOR SPENGLER
- 313-314. SEMINAR IN ECONOMIC THEORY.—Prerequisite: Economics 241-242 or its equivalent. 6 s.h.  
PROFESSOR HOOVER
317. SEMINAR IN POPULATION PROBLEMS.—3 s.h.  
PROFESSOR SPENGLER
318. GENERAL SEMINAR IN ECONOMICS.—No credit.  
STAFF
319. SEMINAR IN THE THEORIES AND PROBLEMS OF ECONOMIC CHANGE.—3 s.h.  
PROFESSOR SPENGLER
320. SEMINAR IN BUSINESS CYCLES.—3 s.h.  
PROFESSOR HUMPHREY
330. SEMINAR IN PUBLIC FINANCE.—3 s.h.  
PROFESSOR RATCHFORD
331. RESEARCH IN ECONOMIC HISTORY: A SEMINAR.—3 s.h.  
PROFESSOR SMITH
343. SEMINAR IN FINANCIAL ORGANIZATION.—3 s.h.  
PROFESSOR RATCHFORD
355. SEMINAR IN LABOR PROBLEMS.—3 s.h.  
PROFESSOR DE VYVER
365. SEMINAR IN INTERNATIONAL TRADE.—3 s.h.  
PROFESSOR HUMPHREY
368. SEMINAR IN MARKETING PROBLEMS.—3 s.h.  
ASSOCIATE PROFESSOR LANDON
386. SEMINAR IN LATIN-AMERICAN ECONOMIC PROBLEMS.—3 s.h.  
PROFESSOR SMITH
389. SEMINAR IN BUSINESS AND GOVERNMENT.—3 s.h.  
PROFESSOR HUMPHREY

## RELATED COURSES IN OTHER DEPARTMENTS

The following course, included in the curriculum of the School of Law, carries economics credit for economics majors:

**PUBLIC CONTROL OF BUSINESS SEMINAR.**—Intensive study of the federal anti-trust laws and their common-law background, with emphasis on the economic policies involved. 3 s.h. PROFESSORS LIVENGOD AND SPENGLER

Attention is called to the following courses in related departments:

Forestry 277; History 219-220; Political Science 207.

## EDUCATION

PROFESSOR CARR, ACTING CHAIRMAN AND ACTING DIRECTOR OF GRADUATE STUDIES—1B WEST DUKE BUILDING; PROFESSORS CHILDS, NAHM, AND PROCTOR; ASSOCIATE PROFESSORS BOLMEIER, EASLEY, RUDISILL, STUMPF, AND WEITZ

### ELEMENTARY EDUCATION

FOR SENIORS AND GRADUATES

- |   |                |
|---|----------------|
| 207. TECHNIQUE OF TEACHING.—3 s.h.                                      | PROFESSOR CARR |
| 212. PSYCHOLOGY OF THE ELEMENTARY SCHOOL SUBJECTS.—3 s.h.               | PROFESSOR CARR |
| 222. THE CURRICULUM AND MATERIALS OF THE ELEMENTARY GRADES.—3 s.h.      | PROFESSOR CARR |
| 232. SUPERVISION OF INSTRUCTION.—3 s.h.                                 | PROFESSOR CARR |
| 235. THE NATURE, FUNCTION, AND REORGANIZATION OF THE CURRICULUM.—3 s.h. | PROFESSOR CARR |

### EXPERIMENTAL EDUCATION AND EDUCATIONAL PSYCHOLOGY

FOR SENIORS AND GRADUATES

- |   |                              |
|---|------------------------------|
| 208A. MENTAL TESTS AND APPLICATIONS.—Prerequisite: course 258 or six semester hours of other work in educational psychology or psychology. 3 s.h. | ASSOCIATE PROFESSOR EASLEY   |
| 208B. PRACTICUM.—2 s.h.   | ASSOCIATE PROFESSOR EASLEY   |
| 209. STATISTICAL METHODS APPLIED TO EDUCATION.—3 s.h.   | ASSOCIATE PROFESSOR STUMPF   |
| 210. INTRODUCTION TO EDUCATIONAL RESEARCH.—3 s.h.   | ASSOCIATE PROFESSOR STUMPF   |
| 216. PSYCHOLOGICAL PRINCIPLES OF SECONDARY EDUCATION.—3 s.h.  | PROFESSOR CHILDS             |
| 217. THE PSYCHOLOGICAL PRINCIPLES OF EDUCATION.—3 s.h.  | ASSOCIATE PROFESSOR EASLEY   |
| 227. THE PSYCHOLOGY OF LEARNING: PROBLEMS.—3 s.h.   | ASSOCIATE PROFESSOR EASLEY   |
| 228. THE PSYCHOLOGY OF LEARNING: THEORETICAL AND EXPERIMENTAL.—Prerequisite: course 227 or its equivalent. 3 s.h.                                 | ASSOCIATE PROFESSOR EASLEY   |
| 237. INVESTIGATIONS IN READING.—3 s.h.  | ASSOCIATE PROFESSOR RUDISILL |
| 258. EDUCATIONAL MEASUREMENTS.—Prerequisite: twelve semester hours in the Department, including a course in educational psychology. 3 s.h.        |                              |

FOR GRADUATES

- |   |  |
|---|--|
| 307-308. SEMINAR IN EDUCATIONAL PSYCHOLOGY.—4 s.h.  |  |
| 318. EDUCATIONAL IMPLICATIONS OF GENETIC PSYCHOLOGY.—Prerequisite: six semester hours of psychology or educational psychology. 3 s.h. |  |
| 320. ADVANCED EDUCATIONAL STATISTICS.—3 s.h.  |  |



339. RESEARCH COURSE IN EDUCATIONAL TESTS.—Prerequisite: the equivalent of course 258. 3 s.h.

### HISTORY AND PHILOSOPHY OF EDUCATION

FOR SENIORS AND GRADUATES

200. INTRODUCTION TO THE PHILOSOPHY OF EDUCATION.—3 s.h.

204. THE SCHOOL AS AN INSTITUTION.—3 s.h.

ASSOCIATE PROFESSOR BOLMEIER

214. HISTORY OF EDUCATION IN THE UNITED STATES.—3 s.h.

244. STUDIES IN THE HISTORICAL DEVELOPMENT OF PUBLIC SCHOOL ADMINISTRATION.—3 s.h.

254. HISTORY OF SECONDARY EDUCATION IN THE UNITED STATES.—3 s.h.

PROFESSOR PROCTOR

### PUBLIC SCHOOL ADMINISTRATION

FOR SENIORS AND GRADUATES

203. PRINCIPLES OF SCHOOL ADMINISTRATION.—Prerequisite: Education 103 and 88, or six semester hours of equivalent work in education. 3 s.h.

PROFESSOR PROCTOR AND ASSOCIATE PROFESSOR BOLMEIER

213. PROBLEMS IN THE ORGANIZATION AND ADMINISTRATION OF THE ELEMENTARY SCHOOL.—3 s.h.

PROFESSOR PROCTOR

233. ADMINISTRATIVE PUPIL-ACCOUNTING.—3 s.h.

PROFESSOR PROCTOR

234. SECONDARY-SCHOOL ORGANIZATION AND ADMINISTRATION.—3 s.h.

ASSOCIATE PROFESSOR BOLMEIER

253. LEGAL PHASES OF SCHOOL ADMINISTRATION.—3 s.h.

FOR GRADUATES

323. PUBLIC SCHOOL FINANCE.—3 s.h.

ASSOCIATE PROFESSOR STUMPF

330-331. PUBLIC SCHOOL ADMINISTRATION, SEMINAR I.—6 s.h. each semester.

PROFESSORS CARR AND PROCTOR, AND ASSOCIATE

PROFESSORS BOLMEIER AND STUMPF

332-333. PUBLIC SCHOOL ADMINISTRATION, SEMINAR II.—6 s.h. each semester.

PROFESSORS CARR AND PROCTOR, AND ASSOCIATE

PROFESSORS BOLMEIER AND STUMPF

343. STATE AND COUNTY SCHOOL ADMINISTRATION.—3 s.h.

PROFESSOR PROCTOR

363. CITY SCHOOL ADMINISTRATION.—3 s.h.

PROFESSOR PROCTOR

### SECONDARY EDUCATION AND EDUCATIONAL SOCIOLOGY

FOR SENIORS AND GRADUATES

205. CURRICULUM PROBLEMS IN SECONDARY EDUCATION.—3 s.h.

PROFESSOR CHILDS

206. SOCIOLOGICAL FOUNDATIONS OF THE SECONDARY SCHOOL SUBJECTS.—Prerequisite: six semester hours in education, including course 105, or Sociology 104, or its equivalent. 3 s.h.

PROFESSOR CHILDS

215. EDUCATIONAL AND VOCATIONAL GUIDANCE.—Prerequisite: twelve semester hours in the Department, including course 105 or course 206. 3 s.h.

PROFESSOR CHILDS

255. GUIDANCE FUNCTIONS OF THE CLASSROOM TEACHER.—Prerequisites: 12 s.h. of work, either in education or in a combination of education and psychology or in psychology. 3 s.h.

ASSOCIATE PROFESSOR WEITZ

## NURSING EDUCATION

310. NURSING EDUCATION: ORGANIZATION AND ADMINISTRATION  
IN NURSING SCHOOLS.—4 s.h. PROFESSOR NAHM

311. NURSING EDUCATION: PROBLEMS OF PERSONNEL ADMINISTRATION  
IN NURSING.—4 s.h. PROFESSOR NAHM

312. NURSING EDUCATION: RESEARCH PROBLEMS.—4 s.h.  
PROFESSOR NAHM

## METHODOLOGY OF RESEARCH

## FOR GRADUATES

301. METHODS OF EDUCATIONAL RESEARCH: SEMINAR.—3 s.h.  
PROFESSORS CARR, CHILDS, AND PROCTOR; AND ASSOCIATE  
PROFESSORS BOLMEIER AND STUMPF

## RELATED COURSES IN OTHER DEPARTMENTS

FOR MAJORS IN EDUCATIONAL PSYCHOLOGY, ELEMENTARY EDUCATION,  
AND SECONDARY EDUCATION

Philosophy 208, 242; Psychology 206, 207, 209, 212, 215, 226, 306, 309, 310;  
Sociology 249, 381, 382.

## FOR MAJORS IN PUBLIC SCHOOL ADMINISTRATION

Economics 217, 233, 234, 236; Political Science 209, 230, 231, 241-242, 291, 292;  
Sociology 233, 235, 237, 243, 246.

## FOR MAJORS IN HISTORY AND PHILOSOPHY OF EDUCATION

History 209-210; Philosophy 205, 208, 223; Religion 395, 396; Sociology 286, 381,  
382.

## ENGLISH

PROFESSOR IRVING, CHAIRMAN—265 WEST DUKE BUILDING; PROFESSOR BAUM, DIRECTOR OF  
GRADUATE STUDIES—402 LIBRARY; PROFESSORS BOYCE, BRINKLEY, FOERSTER, GILBERT,  
GOHDES, HUBBELL, AND LEARY; ASSOCIATE PROFESSOR WARD

## FOR SENIORS AND GRADUATES

201-202. ANGLO-SAXON.—6 s.h. PROFESSOR BAUM

203-204. CHAUCER.—6 s.h. PROFESSOR BAUM

205-206. MIDDLE ENGLISH.—6 s.h. PROFESSOR BAUM

215-216. ELIZABETHAN DRAMA.—6 s.h. PROFESSOR GILBERT

217. MILTON.—3 s.h. PROFESSOR GILBERT

218. SPENSER.—3 s.h. PROFESSOR GILBERT

219-220. THE EIGHTEENTH CENTURY.—6 s.h. PROFESSOR IRVING

221-222. ENGLISH LITERATURE OF THE EARLY NINETEENTH CEN-  
TURY.—6 s.h. VISITING PROFESSOR FOERSTER

223-224. ENGLISH LITERATURE OF THE LATER NINETEENTH CEN-  
TURY.—6 s.h. PROFESSOR BAUM

227. LITERARY CRITICISM.—3 s.h. PROFESSOR GILBERT

229-230. AMERICAN LITERATURE, 1800-1870.—6 s.h.  
PROFESSORS HUBBELL AND LEARY

233-234. AMERICAN LITERATURE SINCE 1870.—6 s.h. PROFESSOR GOHDES

235. HISTORY OF AMERICAN DRAMA.—3 s.h. PROFESSOR LEARY

237. ENGLISH DRAMA, 1642-1800.—3 s.h. ASSOCIATE PROFESSOR WARD

239. SHAKESPEARE.—3 s.h. PROFESSOR GILBERT  
 241. STUDIES IN DRYDEN.—3 s.h. ASSOCIATE PROFESSOR WARD  
 247. LITERATURE IN COLONIAL AMERICA.—3 s.h. PROFESSOR LEARY  
 248. LITERATURE IN AMERICA, 1775-1820.—3 s.h. PROFESSOR LEARY  
 251-252. ENGLISH LITERATURE IN THE SEVENTEENTH CENTURY.  
 ASSOCIATE PROFESSOR WARD  
 269-270. SOUTHERN LITERATURE.—6 s.h. PROFESSOR HUBBELL

## FOR GRADUATES

349-350. SEMINAR COURSES.—6 s.h.

## (a) SIXTEENTH AND SEVENTEENTH CENTURIES.

PROFESSOR GILBERT AND ASSOCIATE PROFESSOR WARD

## (b) EIGHTEENTH CENTURY.

PROFESSORS IRVING AND BOYCE

## (c) EARLY NINETEENTH CENTURY.

## (d) LATER NINETEENTH CENTURY.

PROFESSOR BAUM

## (e) AMERICAN LITERATURE.

PROFESSORS HUBBELL, GOIDES, AND LEARY

359-360. RESEARCH COURSES.—3 or 6 s.h.

STAFF

## FORESTRY

PROFESSOR KORSTIAN, CHAIRMAN AND DIRECTOR OF GRADUATE STUDIES—308 SOCIAL  
 SCIENCE; PROFESSORS COILE, HARRAR, KRAMER, SCHUMACHER, AND  
 WOLF; ASSOCIATE PROFESSOR ANDERSON

## FOR SENIORS AND GRADUATES

224. FOREST PATHOLOGY.—Prerequisites: Botany 1 and 2, and Forestry 253,  
 or equivalents. 4 s.h. PROFESSOR WOLF

231. FOREST ENTOMOLOGY.—3 s.h.

ASSOCIATE PROFESSOR ANDERSON

251. SAMPLING METHODS IN FORESTRY.—Prerequisite: Forestry S151.

PROFESSOR SCHUMACHER

252. FOREST MENSURATION.—Prerequisite: Forestry 251. 2 s.h.

PROFESSOR SCHUMACHER

253. DENDROLOGY.—Prerequisite: one year of botany. 3 s.h.

PROFESSOR HARRAR

257. DESIGN OF FORESTRY EXPERIMENTS AND ANALYSIS OF DATA.—  
 5 s.h. PROFESSOR SCHUMACHER

259. WOOD ANATOMY.—Prerequisite: one year of botany. 3 s.h.

PROFESSOR HARRAR

260. PROPERTIES OF WOOD.—Prerequisites: Forestry 259, one year of college  
 chemistry; one course of college physics. 3 s.h. PROFESSOR HARRAR

261. FOREST SOILS.—Prerequisites: Chemistry 1 and 2, and Physics 1, or  
 equivalents; physical geology, mineralogy, petrology, and analytical chemistry are  
 also desirable. 3 s.h. PROFESSOR COILE

263. SILVICS.—Desirable prerequisites: plant physiology, plant ecology, and  
 Forestry 253 and 261, or equivalents. 3 s.h. PROFESSOR KORSTIAN

275. FORESTRY POLICY.—2 s.h.

277. ECONOMICS OF FORESTRY.—Prerequisite: at least one course in the  
 principles of economics. 3 s.h.

## FOR GRADUATES

323-324. ADVANCED FOREST PATHOLOGY.—Prerequisites: plant physiology and forest pathology. Credits to be arranged. PROFESSOR WOLF

351-352. ADVANCED PHYSIOLOGY OF FOREST TREES.—Prerequisites: plant physiology and plant ecology or silvics. Credits to be arranged. PROFESSOR KRAMER

354. FOREST SOIL FERTILITY.—Prerequisites: Forestry 251 and 261, plant physiology, bacteriology and analytical chemistry. 3 s.h. PROFESSOR COILE

356. COMPARATIVE FOREST VALUATION.—Prerequisite: Forestry 277 or equivalent; courses in economic theory are desirable. 2 s.h.

357-358. RESEARCH IN FORESTRY.—Credits to be arranged.

a. SILVICS.—Prerequisites: Forestry 253, 261, and 263, or equivalents. PROFESSOR KORSTIAN

b. FOREST SOILS.—Prerequisite: Forestry 261 or equivalent. PROFESSOR COILE

e. FOREST ECONOMICS.—Prerequisite: Forestry 277 or equivalent.

f. PROPERTIES OF WOOD.—Prerequisites: Forestry 259 and 260, or equivalents. PROFESSOR HARRAR

g. FOREST MENSURATION.—Prerequisites: Forestry 5151, 251, and 252, or equivalents. PROFESSOR SCHUMACHER

h. FOREST ENTOMOLOGY.—Prerequisite: Forestry 231 or equivalent. ASSOCIATE PROFESSOR ANDERSON

## GERMANIC LANGUAGES AND LITERATURE

PROFESSOR VOLLMER, CHAIRMAN AND DIRECTOR OF GRADUATE STUDIES—106 SOCIAL SCIENCE; ASSOCIATE PROFESSOR SHEARS

201-202. GOETHE.—6 s.h.

203-204. EIGHTEENTH CENTURY.—6 s.h. PROFESSOR VOLLMER

205-206. MIDDLE HIGH GERMAN.—6 s.h. PROFESSOR VOLLMER

207-208. GERMAN ROMANTICISM.—6 s.h. PROFESSOR VOLLMER

209-210. KLEIST, GRILLPARZER, AND HEBBEL.—6 s.h.

211-212. HEINRICH HEINE.—6 s.h. PROFESSOR VOLLMER

213-214. LITERATURE OF THE EMPIRE, 1871-1914.—6 s.h. ASSOCIATE PROFESSOR SHEARS

## FOR GRADUATES ONLY

301-302. GOTHIC—MIDDLE HIGH GERMAN.—6 s.h. PROFESSOR VOLLMER

303-304. GERMAN SEMINAR.—Credit to be arranged. PROFESSOR VOLLMER AND ASSOCIATE PROFESSOR SHEARS

## RELATED COURSES IN OTHER DEPARTMENTS

The following courses in other departments are recommended to students who are majoring in Germanics, as particularly valuable in building a proper background for Germanic studies:

(a) Graduate courses in literature or philology, offered by the ancient and modern language departments, to be selected after consultation with the Germanic Department.

(b) Graduate courses in history and philosophy, offered by those departments, to be selected after consultation with the Germanic Department.

## HISTORY

PROFESSOR LAPRADE, CHAIRMAN AND DIRECTOR OF GRADUATE STUDIES—2B6 WEST DUKE BUILDING; PROFESSORS CARROLL, CLYDE, LANNING, MANCHESTER, ROBERT, AND SYDNOR; ASSOCIATE PROFESSORS CURTISS, HAMILTON, NELSON, ROPP, AND WOODY; ASSISTANT PROFESSORS FERGUSON AND PARKER

## AMERICAN HISTORY

FOR SENIORS AND GRADUATES

203-204. THE UNITED STATES, 1850-1900.—6 s.h.

ASSOCIATE PROFESSOR WOODY

207-208. SOCIAL AND CULTURAL HISTORY OF THE UNITED STATES.—6 s.h. PROFESSOR ROBERT

209-210. CONSTITUTIONAL HISTORY OF THE UNITED STATES, 1763-1860.—6 s.h.

215-216. FOREIGN POLICY AND DIPLOMACY OF THE UNITED STATES.—6 s.h. PROFESSOR CLYDE

230. THE PORTUGUESE EMPIRE AND THE RISE OF BRAZIL.—3 s.h.

PROFESSOR MANCHESTER

231-232. THE HISPANIC COLONIES AND REPUBLICS IN AMERICA.—6 s.h.

PROFESSOR LANNING

233-234. THE INSTITUTIONAL, CULTURAL, AND SOCIAL HISTORY OF HISPANIC AMERICA.—6 s.h. PROFESSOR LANNING

263-264. AMERICAN COLONIAL HISTORY AND THE REVOLUTION, 1606-1783.—6 s.h. ASSOCIATE PROFESSOR WOODY

265-266. THE WESTWARD MOVEMENT IN THE UNITED STATES.—6 s.h.

FOR GRADUATES

315. SEMINAR IN SOUTHERN HISTORY.—2 s.h.

PROFESSOR SYDNOR AND ASSOCIATE PROFESSOR WOODY

321. SEMINAR IN THE HISTORY OF SPAIN, HISPANIC AMERICA, AND INTER-AMERICAN RELATIONS.—2 s.h. PROFESSOR LANNING

336. THE SOUTH IN FEDERAL POLITICS, 1789-1860.—4 s.h.

PROFESSOR SYDNOR

337. SOCIAL AND ECONOMIC LIFE OF THE OLD SOUTH.—4 s.h.

PROFESSOR SYDNOR

## EUROPE AND THE FAR EAST

FOR SENIORS AND GRADUATES

217-218. EUROPE SINCE 1870.—6 s.h.

PROFESSOR CARROLL

219-220. THE HISTORY OF THE EUROPEAN PROLETARIAT.—6 s.h.

PROFESSOR CARROLL

221-222. THE AGE OF THE RENAISSANCE.—6 s.h.

ASSOCIATE PROFESSOR NELSON AND ASSISTANT PROFESSOR FERGUSON

225-226. THE AGE OF THE REFORMATION.—6 s.h.

ASSOCIATE PROFESSOR NELSON

227-228. THE NAPOLEONIC EMPIRE AND ITS AFTERMATH.—6 s.h.

ASSISTANT PROFESSOR PARKER

241-242. NATIONALISM AND REVOLUTIONARY MOVEMENTS IN THE FAR EAST SINCE 1900.—6 s.h. PROFESSOR CLYDE

245-246. WAR IN THE MODERN WORLD.—6 s.h. ASSOCIATE PROFESSOR ROPP

261-262. RUSSIA IN THE TWENTIETH CENTURY.—6 s.h.

ASSOCIATE PROFESSOR CURTISS



## FOR GRADUATES

305. SEMINAR IN THE HISTORY OF ENGLAND AND THE BRITISH EMPIRE.—2 s.h. PROFESSOR LAPRADE
317. SEMINAR IN RECENT EUROPEAN HISTORY.—2 s.h. PROFESSOR CARROLL
325. BRITISH NATIONALITY AND PUBLIC OPINION.—4 s.h. PROFESSOR LAPRADE
327. MODERN PHASES OF THE ENGLISH CONSTITUTION.—4 s.h. PROFESSOR LAPRADE
343. SEMINAR IN THE HISTORY OF AMERICAN FOREIGN RELATIONS AND THE FAR EAST.—2 s.h. PROFESSOR CLYDE

## HISTORIOGRAPHY AND THE TEACHING OF HISTORY

## FOR SENIORS AND GRADUATES

211. THE TEACHING OF HISTORY AND THE SOCIAL STUDIES.—3 s.h. PROFESSOR MANCHESTER

## FOR GRADUATES

312. SEMINAR IN THE TEACHING OF HISTORY IN COLLEGE.—2 s.h. PROFESSOR MANCHESTER AND ASSOCIATE PROFESSOR HAMILTON
320. HISTORIOGRAPHY.—4 s.h. PROFESSOR LAPRADE AND ASSOCIATE PROFESSOR NELSON
329. HISTORIOGRAPHY OF THE SOUTH.—4 s.h. ASSOCIATE PROFESSOR WOODY

## RELATED COURSES IN OTHER DEPARTMENTS

Economics 215, 216, 231, 311-312; Political Science 223, 224; Religion 309, 395, 396; Sociology 382.

## MATHEMATICS

PROFESSOR GERGEN, CHAIRMAN—220 PHYSICS BUILDING; PROFESSOR ROBERTS, DIRECTOR OF GRADUATE STUDIES—219 PHYSICS BUILDING; PROFESSORS CARLITZ, ELLIOTT, RANKIN, AND THOMAS; ASSOCIATE PROFESSOR DRESSL

## FOR SENIORS AND GRADUATES

201. HISTORY OF MATHEMATICS.—Prerequisite: differential calculus. 3 s.h. PROFESSOR RANKIN
- 204 TEACHING OF MATHEMATICS.—3 s.h. PROFESSOR RANKIN
226. GALOIS THEORY OF EQUATIONS.—Prerequisite: calculus. 3 s.h. PROFESSOR THOMAS
- 227-228. THEORY OF NUMBERS.—Prerequisite: calculus. 6 s.h. PROFESSOR CARLITZ
- 229-230. ALGEBRAIC NUMBERS.—Prerequisite: theory of equations. 6 s.h. PROFESSOR CARLITZ
- 235-236. ABSTRACT ALGEBRA.—Prerequisite: calculus. 6 s.h. PROFESSOR CARLITZ
- 247-248. ARITHMETIC OF POLYNOMIALS.—Prerequisite: Mathematics 235 or consent of the instructor. 6 s.h. PROFESSOR CARLITZ
250. HIGHER GEOMETRY.—3 s.h. PROFESSOR THOMAS
- 255-256. PROJECTIVE GEOMETRY.—Prerequisite: calculus. 6 s.h. PROFESSOR THOMAS
258. FINITE DIFFERENCES.—Prerequisite: calculus. 3 s.h. PROFESSOR CARLITZ

271-272. INTRODUCTORY TOPOLOGY.—Prerequisite: calculus. 6 s.h.

PROFESSOR ROBERTS

275. PROBABILITY.—Prerequisite: calculus. 3 s.h.

ASSOCIATE PROFESSOR DRESSEL

285. MATHEMATICAL ANALYSIS FOR CHEMISTS AND PHYSICISTS.—

Prerequisite: Mathematics 53. 3 s.h.

ASSOCIATE PROFESSOR DRESSEL

286. MATHEMATICAL ANALYSIS FOR CHEMISTS AND PHYSICISTS.—

Prerequisite: Mathematics 53. 3 s.h.

ASSOCIATE PROFESSOR DRESSEL

291-292. THEORY OF FUNCTIONS.—Prerequisite: calculus. 6 s.h.

PROFESSOR THOMAS

#### FOR GRADUATES

301-302. ALGEBRAIC GEOMETRY.—Prerequisite: Mathematics 255-256. 6 s.h.

PROFESSOR THOMAS

325-326. REAL VARIABLE.—Prerequisite: Mathematics 291-292. 6 s.h.

PROFESSOR GERGEN

331-332. COMPLEX VARIABLE.—Prerequisite: Mathematics 291-292. 6 s.h.

333-334. ANALYTIC THEORY OF NUMBERS.—Prerequisite: Mathematics 291-292. 6 s.h.

PROFESSOR CARLITZ

337-338. EXISTENCE THEOREMS.—Prerequisite: Mathematics 291-292. 6 s.h.

PROFESSOR THOMAS

341-342. INTEGRAL EQUATIONS.—Prerequisite: differential equations and advanced calculus. 6 s.h.

PROFESSOR ELLIOTT

343-344. ORDINARY DIFFERENTIAL EQUATIONS.—Prerequisite: Mathematics 291-292. 6 s.h.

PROFESSOR THOMAS

351-352. DIFFERENTIAL GEOMETRY.—Prerequisite: calculus. 6 s.h.

PROFESSOR THOMAS

371-372. DIMENSION THEORY.—Prerequisite: Mathematics 271-272. 6 s.h.

PROFESSOR ROBERTS

373-374. CONTINUOUS TRANSFORMATIONS.—Prerequisite: Mathematics 271-272. 6 s.h.

PROFESSOR ROBERTS

## PHILOSOPHY

PROFESSOR NEGLEY, CHAIRMAN—3-1 WEST DUKE BUILDING; PROFESSOR PATTERSON, DIRECTOR OF GRADUATE STUDIES—3-1 WEST DUKE BUILDING; PROFESSORS GILBERT AND WIDGERY; ASSOCIATE PROFESSOR McLARTY; ASSISTANT PROFESSOR WELSH

#### FOR SENIORS AND GRADUATES

201-202. THE PHILOSOPHY OF ART.—6 s.h.

PROFESSOR GILBERT

203. CONTEMPORARY ETHICAL THEORIES.—3 s.h.

PROFESSOR NEGLEY

205. THE PHILOSOPHY OF HISTORY.—3 s.h.

PROFESSOR WIDGERY

208. POLITICAL PHILOSOPHY.—3 s.h.

PROFESSOR NEGLEY

209-210. THE PHILOSOPHY OF RELIGION.—6 s.h.

PROFESSOR WIDGERY

211. HISTORY OF ANCIENT PHILOSOPHY.—3 s.h.

ASSOCIATE PROFESSOR McLARTY

212. HISTORY OF MODERN PHILOSOPHY.—3 s.h.

PROFESSOR PATTERSON

213-214. HISTORY OF AESTHETICS.—6 s.h.

PROFESSOR GILBERT

217. THE PHILOSOPHY OF ARISTOTLE.—Prerequisite: 93 or 211. 3 s.h.

ASSOCIATE PROFESSOR McLARTY

218. MEDIAEVAL PHILOSOPHY.—3 s.h. PROFESSOR PATTERSON  
 223. CONTEMPORARY PHILOSOPHY.—3 s.h. PROFESSOR PATTERSON  
 225. LOCKE, BERKELEY, HUME.—3 s.h. ASSISTANT PROFESSOR WELSH  
 231. PHILOSOPHY OF SCIENCE I.—3 s.h.  
 232. PHILOSOPHY OF SCIENCE II.—3 s.h.  
 236. ORIENTAL PHILOSOPHY I. CHINESE PHILOSOPHY.—3 s.h.  
 PROFESSOR WIDGERY  
 238. ORIENTAL PHILOSOPHY II. INDIAN PHILOSOPHY.—3 s.h.  
 PROFESSOR WIDGERY  
 241. LOGIC.—3 s.h.  
 242. SCIENTIFIC METHODOLOGY.—3 s.h.

## FOR GRADUATES

- 301a-302a, 301b-302b. SEMINAR IN PHILOSOPHY.—3 s.h. PROFESSOR WIDGERY  
 307. SEMINAR: KANT.—3 s.h. PROFESSOR NEGLEY  
 308. SEMINAR: HEGEL.—3 s.h.  
 331-332. SEMINARS IN SPECIAL FIELDS OF PHILOSOPHY.—3 s.h. each semester.  
 (a) LOGIC; (aa) PHILOSOPHY OF SCIENCE.  
 (b) ETHICS; (bb) POLITICAL PHILOSOPHY. PROFESSOR NEGLEY  
 (c) AESTHETICS. PROFESSOR GILBERT  
 (d) PHILOSOPHY OF RELIGION; (dd) HISTORY. PROFESSOR WIDGERY  
 (e) and (ec) HISTORY OF PHILOSOPHY. PROFESSOR PATTERSON  
 341. SEMINAR: PROBLEMS OF POLITICAL AND LEGAL PHILOSOPHY.—3 s.h. PROFESSOR NEGLEY

## PHYSICS

PROFESSOR NIELSEN, CHAIRMAN—119 PHYSICS BUILDING; PROFESSOR NORDHEIM, DIRECTOR OF GRADUATE STUDIES—209 PHYSICS BUILDING; PROFESSORS HATLEY, GORDY, NEWSON, AND SPONER; VISITING PROFESSOR WANG; ASSOCIATE PROFESSORS GREULING AND SMITH

- 201-202. MECHANICS.—6 s.h. VISITING PROFESSOR WANG  
 203-204. ELECTRICITY AND MAGNETISM.—6 s.h. ASSOCIATE PROFESSOR SMITH  
 205. SPECTROSCOPY.—4 s.h. PROFESSOR SPONER  
 213-214. CONTEMPORARY PHYSICS.—6 s.h. VISITING PROFESSOR WANG  
 217-218. ADVANCED PHYSICS LABORATORY.—2-6 s.h. THE STAFF  
 219. INTRODUCTION TO ELECTRONICS.—4 s.h.  
 PROFESSOR GORDY OR ASSOCIATE PROFESSOR SMITH  
 220. ELECTRON CIRCUIT ANALYSIS.—3 s.h.  
 PROFESSOR GORDY OR ASSOCIATE PROFESSOR SMITH  
 243. ELEMENTARY NUCLEAR PHYSICS.—3 s.h. PROFESSOR NEWSON

## FOR GRADUATES

303. THERMODYNAMICS.—3 s.h. PROFESSOR SPONER  
 305. KINETIC THEORY OF MATTER.—3 s.h. ASSISTANT PROFESSOR GREULING  
 307. ADVANCED MECHANICS I.—3 s.h. PROFESSOR NORDHEIM

308. ADVANCED MECHANICS II.—3 s.h. PROFESSOR NORDHEIM
- 315-316. PRINCIPLES OF QUANTUM THEORY.—6 s.h. PROFESSOR NORDHEIM
318. THEORY OF ELECTRICITY AND MAGNETISM.—3 s.h.  
ASSISTANT PROFESSOR GREULING
319. ELECTRODYNAMICS.—3 s.h. ASSISTANT PROFESSOR GREULING
320. THEORY OF ELECTRONS.—3 s.h. ASSISTANT PROFESSOR GREULING
323. THEORY OF ATOMIC SPECTRA.—3 s.h. PROFESSOR SPONER
324. THEORY OF MOLECULAR SPECTRA.—3 s.h. PROFESSOR SPONER
331. MICROWAVE THEORY AND APPLICATION.—4 s.h. PROFESSOR GORDY
335. MICROWAVE SPECTROSCOPY.—3 s.h. PROFESSOR GORDY
340. STRUCTURE OF MATTER.—3 s.h. PROFESSOR SPONER
341. ADVANCED TOPICS IN QUANTUM THEORY.—Prerequisite: Physics  
315-315. 3 s.h. PROFESSOR NORDHEIM
344. ADVANCED NUCLEAR PHYSICS.—3 s.h. PROFESSOR NEWSON
- 351-352. SEMINAR.—2 s.h. STAFF
- 353-354. THESIS SEMINAR.—6 s.h. STAFF

## POLITICAL SCIENCE

PROFESSOR RANKIN, CHAIRMAN—308 LIBRARY; PROFESSOR WILSON, DIRECTOR OF GRADUATE STUDIES—405 NEW TOWER, LIBRARY; PROFESSORS COLE, CONNERY, HALLOWELL, AND VON BECKERATH; ASSISTANT PROFESSOR TRAVIS

## FOR SENIORS AND GRADUATES

207. AMERICAN CONSTITUTIONAL LAW AND THEORY.—3 s.h.  
PROFESSORS WILSON AND RANKIN
209. STATE AND LOCAL GOVERNMENT IN THE UNITED STATES.—3 s.h.  
PROFESSOR RANKIN
211. POLITICAL INSTITUTIONS OF THE FAR EAST.—3 s.h.
212. INTERNATIONAL POLITICS OF THE FAR EAST.—3 s.h.
221. INTERNATIONAL PUBLIC ORGANIZATION.—3 s.h.  
ASSISTANT PROFESSOR TRAVIS
223. POLITICAL THOUGHT TO THE SEVENTEENTH CENTURY.—3 s.h.  
PROFESSOR WILSON
224. MODERN POLITICAL THEORY.—3 s.h. PROFESSOR HALLOWELL
225. COMPARATIVE GOVERNMENT.—3 s.h. PROFESSOR COLE
226. COMPARATIVE GOVERNMENT.—3 s.h. PROFESSOR COLE
- 227-228. INTERNATIONAL LAW.—6 s.h. PROFESSOR WILSON
229. RECENT AND CONTEMPORARY POLITICAL THEORY.—3 s.h.  
PROFESSOR HALLOWELL
230. AMERICAN POLITICAL INSTITUTIONS.—3 s.h. PROFESSOR RANKIN
231. AMERICAN POLITICAL THEORY.—3 s.h. PROFESSOR HALLOWELL
235. THE BRITISH COMMONWEALTH.—3 s.h. PROFESSOR COLE
241. NATIONAL ADMINISTRATION.—3 s.h. PROFESSOR CONNERY
242. ADMINISTRATIVE MANAGEMENT.—3 s.h. PROFESSOR CONNERY
244. ADMINISTRATIVE LAW.—3 s.h. PROFESSOR CONNERY

246. GOVERNMENT ADMINISTRATION AND PUBLIC POLICY.—3 s.h.  
 PROFESSOR CONNERY
247. REGULATORY ADMINISTRATION.—3 s.h.  
 PROFESSOR CONNERY
252. SPANISH-AMERICAN CONSTITUTIONALISM.—3 s.h.
271. SOCIOPOLITICS AND CAPITALISM.—3 s.h. PROFESSOR VON BECKERATH
291. MUNICIPAL GOVERNMENT.—3 s.h. PROFESSOR RANKIN
292. MUNICIPAL ADMINISTRATION.—3 s.h. PROFESSOR RANKIN

## FOR GRADUATES

310. SEMINAR IN STATE GOVERNMENT.—3 s.h. PROFESSOR RANKIN
311. SEMINAR IN FAR EASTERN POLITICS.—3 s.h.
321. SEMINAR IN POLITICAL THEORY.—3 s.h. PROFESSOR HALLOWELL
325. SEMINAR IN COMPARATIVE GOVERNMENT.—3 s.h. PROFESSOR COLE
328. SEMINAR IN INTERNATIONAL LAW.—3 s.h. PROFESSOR WILSON
341. SEMINAR IN PUBLIC ADMINISTRATION.—3 s.h. PROFESSOR CONNERY

## RELATED COURSES IN OTHER DEPARTMENTS

Economics 215, 216, 233, 234, 237-238, 365; History 215-216, 217-218, 234, 261-262; Philosophy 208; Religion 224, 394; Sociology 382.

## PSYCHOLOGY

PROFESSOR RODNICK, CHAIRMAN—107 BIVINS HALL; PROFESSOR ZENER, DIRECTOR OF GRADUATE STUDIES—205 PSYCHOLOGICAL LABORATORY; PROFESSOR RODNICK, DIRECTOR OF CLINICAL TRAINING; PROFESSORS ADAMS, DAI, KUDER, AND LUNDHOLM; ASSOCIATE PROFESSORS BANHAM AND KOCH; ASSISTANT PROFESSORS COHEN AND GARMEZY;

DR. KLOPFER

## FOR SENIORS AND GRADUATES

- 201-202. PROSEMINAR.—9 s.h. each semester.  
 ASSOCIATE PROFESSOR KOCH; PROFESSORS ADAMS, KUDER, RODNICK, AND ZENER; ASSOCIATE PROFESSOR BANHAM
203. DYNAMIC PSYCHOLOGY: CONATION AND OUR CONSCIOUS LIFE.—  
 'u's g PROFESSOR LUNDHOLM
- \*204. MOTIVATION AND LEARNING.—3 s.h.  
 PROFESSOR ZENER AND ASSOCIATE PROFESSOR KOCH
206. SOCIAL PSYCHOLOGY.—3 s.h. PROFESSOR ADAMS
- \*207. PSYCHOLOGY OF MEMORY, THINKING, PERCEIVING.—3 s.h.  
 PROFESSOR ZENER
209. EXPERIMENTAL METHODS IN HUMAN PSYCHOLOGY.—3 s.h.  
 PROFESSOR ZENER
212. PHYSIOLOGICAL PSYCHOLOGY.—Prerequisites: courses in Neuro-anatomy and in Physiology (M204 and M261, or Zoology 324, or their equivalents).  
 3 s.h. PROFESSOR ZENER
215. DEVELOPMENTAL PSYCHOLOGY.—3 s.h. PROFESSOR ADAMS
- 221-222. PROPRACTICUM.—3 s.h. each semester.  
 ASSISTANT PROFESSOR GARMEZY AND CLINICAL STAFF
223. ABNORMAL PSYCHOLOGY.—3 s.h. PROFESSOR LUNDHOLM
224. PSYCHOLOGY OF AESTHETICS.—3 s.h. PROFESSOR LUNDHOLM

\* Not open to students who have taken Psychology 201-202.



226. PSYCHOLOGY: HISTORICAL AND THEORETICAL.—3 s.h.  
PROFESSOR ZENER
236. THEORETICAL PSYCHOLOGY.—3 s.h. ASSOCIATE PROFESSOR KOCH
265. FUNDAMENTAL STATISTICAL PROCEDURES IN PSYCHOLOGY.—  
3 s.h. PROFESSOR KUDER
266. ADVANCED STATISTICS OF PSYCHOLOGICAL INVESTIGATION.—  
Prerequisite: Psychology 265 or its equivalent. 3 s.h. PROFESSOR KUDER
305. PSYCHOPATHOLOGY.—3 s.h. PROFESSOR RODNICK
306. SEMINAR IN DEVELOPMENTAL PSYCHOLOGY.—2 or 3 s.h.  
PROFESSOR ADAMS
308. SEMINAR IN PSYCHOPATHOLOGY AND PERSONALITY THEORY.—  
3 s.h. PROFESSOR RODNICK
309. THEORY OF LEARNING.—3 s.h. PROFESSOR ADAMS
310. SEMINAR: SELECTED PROBLEMS IN THE DYNAMICS OF BEHAV-  
IOR.—3 s.h. PROFESSOR ZENER
312. SEMINAR IN THEORETICAL PSYCHOLOGY.—3 s.h. PROFESSOR KOCH
313. ADVANCED EXPERIMENTAL METHODS: SELECTED PROBLEMS.—  
3 s.h. PROFESSORS RODNICK AND ZENER; ASSOCIATE PROFESSOR KOCH
320. SEMINAR IN THE THEORY OF MENTAL TESTS.—3 s.h.  
PROFESSOR KUDER
322. SEMINAR IN PERSONNEL PSYCHOLOGY.—3 s.h. PROFESSOR KUDER
331. INTERVIEWING METHODS OF CASE STUDY.—3 s.h.  
ASSOCIATE PROFESSOR BANHAM
- 335-336. CLINICAL PSYCHOLOGY PRACTICUM.—Prerequisite: Psychology  
221 and 222. 3 s.h. fall semester, 6 s.h. spring semester.  
ASSISTANT PROFESSOR COHEN AND CLINICAL STAFF
341. SOCIETY, CULTURE AND BEHAVIOR DISORDERS—3 s.h.  
PROFESSOR DAI
342. PRINCIPLES OF PSYCHOTHERAPY.—3 s.h. PROFESSOR DAI
371. PRE-SCHOOL BEHAVIOR PROBLEMS.—Prerequisites: at least one course  
in child development, in mental measurement, and in abnormal psychology. 3 s.h.  
ASSOCIATE PROFESSOR BANHAM

## RELATED COURSES IN OTHER DEPARTMENTS

Education 208A, 208B, 209, 217, 227, 228, 258, 318; Philosophy 203, 208, 223,  
225, 231, 242, 331-332a; Sociology 211, 212, 238, 243, 246, 249, 271, 276, 330, 380;  
Zoology 229, 324, 341, 351-352, 355-356; Physiology 261-262; Anatomy 204.

## RELIGION

PROFESSOR SMITH, DIRECTOR OF GRADUATE STUDIES—302 DIVINITY SCHOOL; PROFESSORS  
CLARK, CUSHMAN, DAVIES, PETRY, SPENCE, AND STINESPRING; ASSOCIATE  
PROFESSOR BEACH; ASSISTANT PROFESSOR BROWNLEE

## FIELD I. BIBLICAL STUDIES

- 201-202. FIRST HEBREW.—6 s.h. PROFESSOR STINESPRING
- 205-206. ARABIC.—Hours to be arranged. 6 s.h. PROFESSOR STINESPRING
- 207-208. SECOND HEBREW.—6 s.h. ASSISTANT PROFESSOR BROWNLEE
217. THE NEW TESTAMENT IN GREEK.—3 s.h. PROFESSOR CLARK
218. GALATIANS AND I CORINTHIANS.—3 s.h. PROFESSOR CLARK

220. I PETER AND THE GOSPEL OF JOHN.—Prerequisite: 6 s.h. study of the Greek language. 3 s.h. PROFESSOR DAVIES
301. THE RELIGIOUS THOUGHT OF POST-EXILIC JUDAISM.—3 s.h. ASSISTANT PROFESSOR BROWNLEE
304. ARAMAIC.—3 s.h. PROFESSOR STINESPRING
305. THIRD HEBREW.—3 s.h. PROFESSOR STINESPRING
307. SYRIAC.—3 s.h. PROFESSOR STINESPRING
309. HISTORY OF THE ANCIENT NEAR EAST.—3 s.h. PROFESSOR STINESPRING
310. OLD TESTAMENT PROPHECY.—3 s.h. PROFESSOR STINESPRING
311. THE LIFE AND TEACHINGS OF JESUS.—Prerequisite: New Testament 213-214. 3 s.h. PROFESSOR CLARK
312. NEW TESTAMENT THEOLOGY.—3 s.h. PROFESSOR DAVIES
313. THE APOSTOLIC FATHERS.—3 s.h. PROFESSOR CLARK
314. PATRISTIC THOUGHT.—3 s.h. PROFESSOR DAVIES
316. HELLENISTIC RELIGIONS AT THE BEGINNING OF THE CHRISTIAN ERA.—3 s.h. PROFESSOR CLARK
317. THE SYNOPTIC GOSPELS.—Prerequisite: a basic "Introduction" to the New Testament. 3 s.h. PROFESSOR CLARK
318. TEXT OF NEW TESTAMENT.—3 s.h. PROFESSOR CLARK
319. PAUL AND RABBINIC JUDAISM.—3 s.h. PROFESSOR DAVIES

## RELATED COURSES IN OTHER DEPARTMENTS

Greek 257; Latin 258; Aesthetics, Art, and Music 215, 216.

## FIELD II. STUDIES IN CHURCH HISTORY

330. THE CHURCH IN EUROPE SINCE 1800.—3 s.h. PROFESSOR PETRY
331. THE SOCIAL MESSAGE OF THE EARLY AND MEDIEVAL CHURCH.—3 s.h. PROFESSOR PETRY
332. THE MEDIEVAL CHURCH.—3 s.h. PROFESSOR PETRY
334. CHURCH REFORMERS AND CHRISTIAN UNITY.—3 s.h. PROFESSOR PETRY
336. HISTORY OF CHRISTIAN RENUNCIATION IN THE MIDDLE AGES.—3 s.h. PROFESSOR PETRY
365. HISTORY OF RELIGIOUS EDUCATION IN MODERN TIMES.—3 s.h. PROFESSOR SPENCE

## RELATED COURSES IN OTHER DEPARTMENTS

History 221-222, 225-226.

## FIELD III. STUDIES IN CHRISTIAN THOUGHT

224. CONCEPTIONS OF MAN IN WESTERN THOUGHT.—Prerequisite: 3 s.h. in Christian Doctrine or 6 s.h. in Philosophy. 3 s.h. PROFESSOR CUSHMAN
321. PLATONISM AND CHRISTIANITY.—Prerequisite: 6 s.h. in philosophy or its equivalent. 3 s.h. PROFESSOR CUSHMAN
322. THEOLOGY AND PHILOSOPHY IN THE NINETEENTH CENTURY.—3 s.h. PROFESSOR CUSHMAN
325. PHILOSOPHICAL THEOLOGY I.—3 s.h. PROFESSOR CUSHMAN
326. PHILOSOPHICAL THEOLOGY II.—3 s.h. PROFESSOR CUSHMAN

328. SEMINAR IN 20TH CENTURY CONTINENTAL AND BRITISH THEOLOGY.—3 s.h. PROFESSOR CUSHMAN
329. SEMINAR IN HISTORICAL THEOLOGY.—2 s.h.
368. THEORIES OF RELIGIOUS EDUCATION.—3 s.h. PROFESSOR SPENCE
- 391-392. HISTORICAL TYPES OF CHRISTIAN ETHICS.—6 s.h. ASSOCIATE PROFESSOR BEACH
394. CHRISTIANITY AND THE STATE.—3 s.h. ASSOCIATE PROFESSOR BEACH
395. RELIGIOUS THOUGHT IN COLONIAL AMERICA.—3 s.h. PROFESSOR SMITH
396. AMERICAN RELIGIOUS THOUGHT IN THE NINETEENTH CENTURY.—3 s.h. PROFESSOR SMITH
397. CURRENT AMERICAN THEOLOGY.—3 s.h. PROFESSOR SMITH
398. MODERN AMERICAN CHRISTOLOGY.—3 s.h. PROFESSOR SMITH
495. SEMINAR: JONATHAN EDWARDS AND JOHN WESLEY.—2 s.h. PROFESSOR SMITH
498. SEMINAR: REINHOLD NIEBUHR AND PAUL TILLICH.—2 s.h. PROFESSOR SMITH

## RELATED COURSES IN OTHER DEPARTMENTS

Political Science 229, 231.

## OTHER COURSES

Certain other courses listed in this bulletin and the *Bulletin of the Divinity School* may be taken for graduate credit provided that at the time of registration they are approved by the Director of Graduate Studies in Religion and by the Dean of the Graduate School.

## ROMANCE LANGUAGES

PROFESSOR JORDAN, CHAIRMAN AND DIRECTOR OF GRADUATE STUDIES—214 CARR;  
PROFESSORS COWPER, FREDMORE, AND WALTON; ASSOCIATE  
PROFESSORS CASTELLANO AND DAVIS

## FRENCH

## FOR SENIORS AND GRADUATES

213. FRENCH CLASSICISM.—3 s.h. PROFESSOR WALTON
214. FRENCH CLASSICISM.—3 s.h. PROFESSOR WALTON
- 215-216. THE MODERN FRENCH NOVEL.—6 s.h. PROFESSOR JORDAN
219. OLD FRENCH.—3 s.h. PROFESSOR COWPER
220. OLD FRENCH.—3 s.h. PROFESSOR COWPER
227. FRENCH POETRY SINCE THÉOPHILE GAUTIER.—3 s.h. PROFESSOR WALTON
232. ROUSSEAU AND THE BEGINNINGS OF ROMANTICISM.—3 s.h. PROFESSOR COWPER
238. ANATOLE FRANCE.—3 s.h. PROFESSOR WALTON

## FOR GRADUATES

317. HISTORY OF THE FRENCH LANGUAGE.—3 s.h. PROFESSOR COWPER
- 323-324. REALISM AND NATURALISM.—6 s.h. PROFESSOR JORDAN
- 325-326. FRENCH LITERATURE IN THE SIXTEENTH CENTURY.—6 s.h. PROFESSOR WALTON

331. DIDEROT AND THE ENCYCLOPÉDIE.—3 s.h. PROFESSOR COWPER

333-334. CONTEMPORARY FRENCH LITERATURE.—6 s.h.  
PROFESSOR JORDAN

350. NINETEENTH-CENTURY FRENCH CRITICISM.—3 s.h.  
PROFESSOR JORDAN

### SPANISH

#### FOR SENIORS AND GRADUATES

257. OLD SPANISH LANGUAGE.—3 s.h. ASSISTANT PROFESSOR DAVIS

258. OLD SPANISH LITERATURE.—3 s.h. ASSOCIATE PROFESSOR DAVIS

260. ADVANCED COMPOSITION AND SYNTAX.—Prerequisite: Spanish 173-  
174 or permission. 3 s.h. ASSOCIATE PROFESSOR CASTELLANO

261-262. MODERN SPANISH NOVEL.—6 s.h.

264. MODERN AND CONTEMPORARY SPANISH THEATER.—3 s.h.  
ASSOCIATE PROFESSOR CASTELLANO

265. GOLDEN AGE LITERATURE: CERVANTES.—3 s.h. PROFESSOR PREDMORE

266. GOLDEN AGE LITERATURE: THE DRAMA.—3 s.h.  
ASSOCIATE PROFESSOR CASTELLANO

275. CONTEMPORARY SPANISH LITERATURE.—3 s.h. PROFESSOR PREDMORE

276. CONTEMPORARY SPANISH LITERATURE. PROFESSOR PREDMORE

### SOCIOLOGY AND ANTHROPOLOGY

PROFESSOR JENSEN, CHAIRMAN—215E SOCIAL SCIENCE BUILDING; PROFESSOR HART, DIRECTOR  
OF GRADUATE STUDIES—215D SOCIAL SCIENCE BUILDING; PROFESSOR THOMPSON;  
ASSOCIATE PROFESSORS LABARRE AND SCHETTIER

#### ANTHROPOLOGY

211. PEOPLES OF THE WORLD.—Prerequisite: course 91-92, 101, 111 or  
112. 3 s.h. ASSOCIATE PROFESSOR LABARRE

212. PRIMITIVE RELIGION.—Prerequisite: course 91-92, 101, 111 or 112. 3 s.h.  
ASSOCIATE PROFESSOR LABARRE

213. PERSONALITY AND SOCIETY.—3 s.h. ASSOCIATE PROFESSOR LABARRE

214. PERSONALITY AND CULTURE.—Prerequisite: course 213. 3 s.h.  
ASSOCIATE PROFESSOR LABARRE

330. SEMINAR IN ANTHROPOLOGY.—1 to 3 s.h.  
ASSOCIATE PROFESSOR LABARRE

#### COMMUNITY, RACE AND CULTURE

(Either 91-92, 101, 111 or 112 prerequisite for all courses.)

233. RURAL SOCIOLOGY.—3 s.h. PROFESSOR THOMPSON

235. URBAN SOCIOLOGY.—3 s.h. PROFESSOR THOMPSON  
[Offered in Summer Session, 1951]

237. COMMUNITY AND SOCIETY.—3 s.h. PROFESSOR THOMPSON

238. RACE AND CULTURE.—3 s.h. PROFESSOR THOMPSON  
[Offered in Summer Session, 1951]

340. SEMINAR.—3 s.h. PROFESSOR THOMPSON

#### COLLECTIVE BEHAVIOR

243. SOCIAL ATTITUDES AND COLLECTIVE BEHAVIOR.—Prerequisite:  
course 91-92, 101, or 111 or 112. 3 s.h. ASSOCIATE PROFESSOR SCHETTIER

246. PUBLIC OPINION AND PROPAGANDA.—Prerequisite: course 91-92, 101, or 111 or 112. 3 s.h. ASSOCIATE PROFESSOR SCHETTLER

249. CHILD WELFARE.—Prerequisite: course 91-92, 101, 111 or 112. 3 s.h. PROFESSOR JENSEN

250. MARRIAGE AND THE FAMILY.—Prerequisite: course 91-92, 101, 111 or 112. 3 s.h. PROFESSOR HART

#### SOCIAL ORGANIZATION AND DISORGANIZATION

271. SOCIAL PATHOLOGY.—Prerequisite: course 91-92, 101, 111 or 112. 3 s.h. PROFESSOR JENSEN

273. SPECIAL PROBLEMS IN SOCIAL PATHOLOGY.—1 to 3 s.h. *each semester.* PROFESSOR JENSEN

276. CRIMINOLOGY.—Prerequisite: course 91-92, 101, 111 or 112. 3 s.h. PROFESSOR JENSEN

377. SEMINAR IN MEDICAL SOCIOLOGY.—2 s.h.

378. SEMINAR IN FAMILY LAW.—2 s.h. PROFESSOR BRADWAY

380. SEMINAR IN APPLIED SOCIOLOGY.—2 to 3 s.h. *each semester.* PROFESSOR JENSEN

#### SOCIAL THEORY

286. SOCIAL ETHICS.—Prerequisite: course 91-92, 101, or 111 or 112. 3 s.h. PROFESSOR HART

288. CONTEMPORARY PROBLEMS IN CULTURAL LAG.—Prerequisite: course 91-92, 101, or 111 or 112. 3 s.h. PROFESSOR HART

381. PRINCIPLES OF SOCIOLOGY.—3 s.h. PROFESSOR JENSEN

382. HISTORY OF SOCIOLOGICAL THEORY.—3 s.h. PROFESSOR JENSEN

#### METHODS OF SOCIAL RESEARCH

292. STATISTICAL TECHNIQUES IN SOCIOLOGY.—Prerequisite: course 91-92, 101, 111 or 112. 3 s.h. PROFESSOR HART

293-294. SPECIAL PROBLEMS IN SOCIAL STATISTICS.—1 to 3 s.h. *each semester.* PROFESSOR HART

391. SEMINAR IN SOCIAL STATISTICS.—1 to 3 s.h. *each semester.* PROFESSOR HART

396. METHODS OF SOCIAL RESEARCH.—3 s.h. PROFESSOR JENSEN

393. OPERATIONAL SOCIOLOGY.—Prerequisite: one of the following: Sociology 291 or Economics 237-238, or Education 209, or Mathematics 124, or some other acceptable course in statistics. 3 s.h. PROFESSOR HART

399. DEPARTMENTAL SEMINAR.—1 s.h. *each semester.*

PROFESSORS JENSEN, HART, AND THOMPSON; ASSOCIATE PROFESSORS SCHETTLER AND LABARRE

#### RELATED COURSES IN OTHER DEPARTMENTS

Economics 215, 216, 217; Philosophy 205; Political Science 223, 224; Psychology 206.

#### ZOOLOGY

PROFESSOR GRAY, CHAIRMAN—218 BIOLOGY BUILDING; PROFESSOR WILBUR, DIRECTOR OF GRADUATE STUDIES—328 BIOLOGY BUILDING; PROFESSOR EMERITUS PEARSE; PROFESSOR HARGITT; ASSOCIATE PROFESSORS BOOKHOUT, HUNTER, AND WHARTON; ASSISTANT PROFESSOR HORN

#### FOR SENIORS AND GRADUATES

202. HELMINTHOLOGY.—Prerequisite: Zoology 161. 4 s.h. ASSOCIATE PROFESSOR HUNTER



204. ADVANCED PARASITOLOGY.—Prerequisite: Zoology 161. 4 s.h.  
ASSOCIATE PROFESSOR WHARTON
222. ENTOMOLOGY.—Prerequisite: one year of zoology. 4 s.h. PROFESSOR GRAY
224. VERTEBRATE ZOOLOGY.—Prerequisite: Zoology 53. 4 s.h.  
PROFESSOR GRAY
229. ENDOCRINOLOGY.—Prerequisites: Zoology 53, 92, and 171. 4 s.h.  
92. 4 s.h. ASSISTANT PROFESSOR HORN
238. SYSTEMATIC ZOOLOGY.—Prerequisites: Zoology 1 and 2. 4 s.h.  
ASSOCIATE PROFESSOR WHARTON
253. ADVANCED VERTEBRATE MORPHOLOGY.—Prerequisites: Zoology 53, 92, 171, and 271. 4 s.h.
271. GENERAL PHYSIOLOGY.—Prerequisites: two years of biology and at least one year of chemistry. 4 s.h. PROFESSOR WILBUR
274. INVERTEBRATE ZOOLOGY.—Prerequisites: Zoology 1 and 2. 4 s.h.  
ASSOCIATE PROFESSOR BOOKHOUT
276. PROTOZOOLOGY.—Prerequisites: Zoology 1 and 2. 4 s.h.  
ASSOCIATE PROFESSOR BOOKHOUT
278. INVERTEBRATE EMBRYOLOGY.—Prerequisite: Zoology 92. 4 s.h.  
ASSOCIATE PROFESSOR BOOKHOUT

## FOR GRADUATES

303. ECOLOGY.—4 s.h. PROFESSOR GRAY
306. ADVANCED ECOLOGY.—Prerequisite: Zoology 303. 4 s.h.
307. FOUNDATIONS OF ZOOLOGY.—2 s.h.
324. ADVANCED PHYSIOLOGY.—Prerequisite: Zoology 271. 4 s.h.  
PROFESSOR WILBUR
328. EXPERIMENTAL EMBRYOLOGY.—Prerequisites: Zoology 53, 92, 156, 271, or equivalent. 4 s.h.
341. HISTORICAL ZOOLOGY.—2 s.h. PROFESSOR HARGITT
343. CYTOLOGY.—Prerequisites: Zoology 53, 92, 156, or equivalent. 4 s.h.  
PROFESSOR HARGITT
- 351-352. ZOOLOGICAL JOURNAL CLUB.—2 s.h. STAFF
- 353-354. RESEARCH.—Hours and credits to be arranged.
- (a) EMBRYOLOGY.
- (b) PHYSIOLOGY. PROFESSOR WILBUR
- (c) HISTOLOGY, CYTOLOGY. PROFESSOR HARGITT
- (d) INVERTEBRATE ZOOLOGY, INVERTEBRATE HISTOLOGY, AND EMBRYOLOGY. ASSOCIATE PROFESSOR BOOKHOUT
- (e) ECOLOGY. PROFESSOR GRAY
- (f) ENTOMOLOGY, VERTEBRATE ZOOLOGY. PROFESSOR GRAY
- (g) VERTEBRATE MORPHOLOGY AND MORPHOGENESIS.  
ASSISTANT PROFESSOR HORN
- (h) PARASITOLOGY. ASSOCIATE PROFESSOR HUNTER
- (i) PARASITOLOGY. ASSOCIATE PROFESSOR WHARTON
- 355-356. SEMINAR.—2 s.h.

## COURSES IN THE MEDICAL SCHOOL OPEN TO GRADUATE STUDENTS

PROFESSORS BEARD, F. BERNHEIM, CONANT, EADIE, EVERETT, HALL, HANDLER, HETHERINGTON,  
MARKEE, SAWYER, D. T. SMITH, AND TAYLOR; ASSOCIATE PROFESSORS M.L.C. BERN-  
HEIM, DUKE, NICCREA, PEELE, AND TAYLOR; ASSISTANT PROFESSORS  
SCHWERT AND RUNDLES

### ANATOMY

Completion of training equivalent to that required of an undergraduate majoring in biology is prerequisite for these courses in human anatomy.

M201. GROSS HUMAN ANATOMY.—Hours and credits (maximum 8 s.h.) by arrangement. Prerequisite: adequate training in comparative anatomy and embryology. DR. MARKEE AND STAFF

M202. MICROSCOPIC ANATOMY.—Hours and credits (maximum 3 s.h.) by arrangement. Prerequisite: adequate training in histology or cytology. DR. MARKEE AND STAFF

M203. ANATOMY OF THE NERVOUS SYSTEM.—Hours and credits (maximum 4 s.h.) by arrangement. Prerequisite: Anatomy M201. DR. MARKEE AND STAFF

M204. NEUROANATOMICAL BASIS OF BEHAVIOR.—3 s.h. DR. HETHERINGTON

### BIOCHEMISTRY AND NUTRITION

M241. GENERAL BIOCHEMISTRY AND NUTRITION.—Prerequisites: general chemistry, organic chemistry, physical and analytical chemistry, and at least one year of college biology. 8 s.h.; without laboratory work 3 s.h. DRS. HANDLER, TAYLOR, M. L. C. BERNHEIM,  
SCHWERT AND KAMIN

M242. BIOCHEMICAL PREPARATIONS.—Prerequisite: Biochemistry 241 or its equivalent. 2, 3, or 4 s.h. DRS. HANDLER, M. L. C. BERNHEIM, AND SCHWERT

M341. THEORIES AND METHODS OF PHYSICAL BIOCHEMISTRY.—2 s.h. DR. SCHWERT

M343-344. BIOCHEMISTRY OF PROTEINS AND ENZYMES.—4 s.h. DR. SCHWERT

M345-346.—2 s.h. DRS. HANDLER, TAYLOR, SCHWERT, AND M. L. C. BERNHEIM

M347-348. BIOCHEMICAL RESEARCH.—Prerequisite: Biochemistry M241 or its equivalent. 2, 3, or 4 s.h.

DRS. HANDLER, TAYLOR, SCHWERT, AND M. L. C. BERNHEIM

M349-350. INTERMEDIARY METABOLISM.—Prerequisite: Biochemistry M241 or its equivalent. 4 s.h. DR. HANDLER

M351. NUTRITION.—Prerequisite: Biochemistry M241 or its equivalent. Given alternately with Biochemistry M349-350. 2 s.h. DR. HANDLER

M354. BIOCHEMISTRY OF DISEASE.—2 s.h. DR. HANDLER

### MICROBIOLOGY

M221. BACTERIOLOGY AND IMMUNOLOGY.—Prerequisites: courses in general zoology, general botany, histology and comparative anatomy, general and organic chemistry. 6 s.h. DR. D. T. SMITH AND STAFF

M322. IMMUNOCHEMISTRY.—2 s.h.

M323. ADVANCED BACTERIOLOGY AND IMMUNOLOGY.—Prerequisites: Bacteriology and Immunology, M221. 8 s.h. DR. D. T. SMITH AND STAFF

M324. RESEARCH SEMINAR ON VIRUSES.—2 s.h. *per semester*. DR. BEARD

M325. MEDICAL MYCOLOGY.—Prerequisites: A.M. in Botany with Major in Mycology and M221. Course limited to four students each year. 8 s.h.

DR. CONANT

#### HEMATOLOGY

M211.—Prerequisites: courses in general zoology, general botany, histology and comparative anatomy. 4 s.h.

DR. RUNDLES

#### MEDICAL PARASITOLOGY

M291. MEDICAL PARASITOLOGY.—Prerequisites: courses in Zoology 204, general botany, histology and comparative anatomy. 1 s.h.

#### PHYSIOLOGY AND PHARMACOLOGY

M261-262. HUMAN PHYSIOLOGY.—Prerequisites: Anatomy M201 and Biochemistry M241 (or equivalents) and at least one year of college physics. Credits depending on work taken. (Maximum 8 s.h.).

M365. RESPIRATION AND AERO-PHYSIOLOGY.—Prerequisites: M261-262 or equivalent. 4 s.h.

DR. HALL

M367. PHYSIOLOGY OF THE NERVOUS SYSTEM.—Prerequisites: M261-262 or equivalent. 2 s.h.

DR. EADIE

M369. PHARMACOLOGY. MODE OF ACTION OF DRUGS.—Prerequisites: M261-262 or equivalent. 4 s.h.

DR. F. BERNHEIM

M370. SEMINAR.—2 s.h.

DR. EADIE, DR. HALL AND STAFF

M372. RESEARCH.—Credits to be arranged.

STAFF

# THE DIVINITY SCHOOL

Fall Semester begins September 20, 1951

Spring Semester begins January 29, 1952

# General Information



## HISTORICAL STATEMENT

THE Indenture of Trust signed on December 11, 1924, by Mr. James B. Duke, which established Duke University, mentioned first among its objects the training of ministers of the Gospel. The Divinity School was, accordingly, the first of the graduate professional schools to be organized. Its work began with the year 1926-27, the formal opening exercises being held on November 9, 1926.

The Reverend Doctor Edmund Davison Soper was the first dean of the Divinity School. He was succeeded in 1928 by the Reverend Doctor Elbert Russell, and the latter in turn in 1941 by the Reverend Doctor Paul Neff Garber. In 1944, Dean Garber was elected to the episcopacy of the Methodist Church, and Doctor Harvie Branscomb assumed the duties of the dean's office. In 1946, Dean Branscomb became Chancellor of Vanderbilt University, and in 1947 the Reverend Doctor Paul E. Root was elected dean but died before he could assume the office. The Reverend Doctor Harold A. Bosley became dean in 1947 and resigned in 1950 to become the pastor of the First Methodist Church, Evanston, Ill. The Reverend Doctor James Cannon was appointed Dean of the Divinity School March 1, 1951.

## THE PURPOSE OF THE DIVINITY SCHOOL

The primary purpose of the Divinity School is to provide training for individuals planning to enter the Christian ministry. This includes not only prospective ministers in local churches, but also those preparing themselves to be missionaries at home and abroad, directors of religious education, teachers of religion, chaplains, and social workers. Vital to all of these forms of service is a full understanding of the beginnings, content, and history of the Christian faith and its special pertinence for the spiritual needs of the modern world. Studies of a broad and thorough character directed toward such an understanding constitute the center of the curriculum of the Divinity School and are regarded as the basic training for all prospective Christian workers. Specific training in the skills required of local ministers and of leaders in the work of religious education are also provided. As funds become available for the purpose and as needs appear, additional training in specialized skills and areas of knowledge will be added to the curriculum.



Though bound by ties of history and obligations to the Methodist Church, the Divinity School is ecumenical in its interests and outlook. Its faculty is limited to no one denomination, but draws upon the resources of them all. Students of the several denominations are admitted on the same basis. The Divinity School conceives its task to be one of broad service to the Church of Christ in all of its forms.

### THE RELATION OF THE DIVINITY SCHOOL TO DUKE UNIVERSITY

The Divinity School is an integral unit of the University and shares fully in its activities, privileges and responsibilities. The Sunday services in the University Chapel give the Divinity School students an opportunity to hear each year a number of leading preachers of the country. The University Libraries make easily accessible a rich collection of approximately a million volumes. Selected courses in the Graduate School of Arts and Sciences and in the professional schools are open to Divinity School students without payment of additional fees. The general cultural and recreational resources of the University are available to them on the same basis as other students.

### LIBRARY RESOURCES

The Divinity School has its own library containing over fifty thousand volumes. It is rich in complete files of the more important religious journals and periodicals, in source materials, particularly for the study of American church history, missions and the history of religion, and in facsimiles of the more important manuscripts of the New Testament. Among the most treasured possessions of the Library are fifteen Greek manuscripts of the eleventh to seventeenth centuries. Eleven are Greek New Testament, of which one is a magnificent manuscript of the thirteenth or fourteenth century, containing the entire text of the New Testament; four are liturgical manuscripts containing material valuable for studies in the New Testament and church history.

The combined libraries of the University contain over a million volumes. The General Library of the University is connected by a corridor with the Divinity School Building. It contains seven hundred thousand volumes and receives the current issues of several thousand periodicals. The General Library contains also a catalogue of the library of the University of North Carolina located at Chapel Hill, twelve miles away, and a system of exchange operates between the two libraries so that books may be secured from that library also within a few hours.

The Henry Harrison Jordan Loan Library was endowed in 1947 by the children of the late Reverend Henry Harrison Jordan for the purpose of providing ministers in the field with the best of current reli-

gious literature. This collection was an outgrowth of the Duke Divinity School Loan Library established in 1944.

### RELIGIOUS AND SOCIAL LIFE

One of the most important aspects of a program of training for religious service is the development of a warm and discriminating spiritual experience. The center of the corporate life of the Divinity School is its own place of worship, York Chapel. Regular chapel services are held at which all students are expected to be present. Services are led by members of the faculty, by visiting ministers, and by members of the student body. Ordination and other special services are held upon occasion. On each Sunday morning services are held in the University Chapel.

The student body of the Divinity School is united by a strong sense of fellowship and common interest. Student committees organize and supervise social projects and missions of preaching, jail visitation, and related enterprises. Opportunities for occasional preaching are always available.

### PUBLIC LECTURES

The Divinity School presents several public lectures annually. The lectures for 1950-51 were: Professor Roger Hazelton, Abbot Professor of Christian Theology in Andover-Newton Theological Seminary, "Theology and Liturgy"; Dr. Emile Cailliet who holds the Stuart Chair of Christian Philosophy at Princeton Theological Seminary, "The Pascalian Answer to Our Problems"; Harrison S. Elliott, General Secretary, The Religious Education Association of the United States and Canada, "Current Issues in Religious Education"; and Dr. Ralph A. Felton, of Drew Theological Seminary, "The Rural Church in a Changing Society." Other visiting speakers were the Reverend Garland Hendricks, Bishop Charles Brashares, Dr. E. McNeil Poteat, Dr. Eugene Conover and Mr. John Scotford. Speakers at the annual Missionary Emphasis Week were Dr. Eugene Smith, Dr. Karl Quimby, Dr. J. A. Engle, Dr. M. O. Williams, and the Reverend Archer R. Turner, all of the Methodist Board of Missions.

### THE DIVINITY SCHOOL LIBRARY LECTURES

In 1948 the Duke Divinity School Library Lectures were established by the Reverend George Brinkmann Ehlhardt for the purpose of bringing to the campus a succession of the greatest religious leaders of the day. In 1950 this lecture was given by the Reverend Doctor John Cecil Trever, Director of the Department of the English Bible, The International Council on Religious Education. The lecture, entitled "From Ancient Scroll to Modern Bible," was given in conjunction with the exhibition of three ancient Hebrew scrolls lent by

His Eminence, Mar Athanasius Yeshue Samuel, Metropolitan and Archbishop of Jerusalem and Trans-Jordan.

The lecturer for 1951 was Bishop Paul Neff Garber, presiding Bishop of the Geneva Area of the Methodist Church who spoke on the subject, "Religion in Europe As I Have Seen It."

### THE CHRISTIAN CONVOCATION

The Christian Convocation of 1951 will be held on the Duke campus from June 5-8. The Convocation, under the joint sponsorship of the Duke Divinity School, The North Carolina Pastors' School, The North Carolina Rural Church Institute, and The Board of Ministerial Training of the Methodist Church, will bring to the campus an outstanding group of religious leaders as lecturers and teachers.

### ENDOWED SCHOLARSHIP FUNDS

Certain special scholarship funds have been established, the income of which is available for students wishing to secure training in preparation for the Christian ministry.

These scholarships are all awarded on the basis of service performed in a local church, thus providing for the student experience as well as financial aid. They are listed in the *Bulletin of the Divinity School*.

### COURSES OF STUDY OFFERED BY THE DIVINITY SCHOOL

The Divinity School offers at present two courses of study. The basic course is that which leads to the degree of Bachelor of Divinity. This is a three-year course and is recommended to all those preparing themselves for the work of the regular pastoral ministry. Students who hold pastoral charges, or other remunerative work requiring any substantial time apart from their studies, may carry only reduced schedules of work and in most cases, unless work is taken in the Duke University Summer Session, will spend four years in completion of the requirements for the B.D. degree.

Beginning with the year 1944-45 the Divinity School offered also a course of study leading to the degree of Master of Religious Education. This course is designed for individuals who wish to become directors or to take other specialized positions in the work of religious education. The course does not provide a general preparation for the work of the regular ministry and cannot serve as a substitute for it. No exchange of credits between the two courses is permitted, nor can departmental courses taken be credited toward more than one degree. Only a limited number of candidates for the Master of Religious Education degree will be accepted annually.

### COURSES OF STUDY IN RELIGION OFFERED BY THE GRADUATE SCHOOL OF ARTS AND SCIENCES

Students who desire to pursue work in religion beyond that for the Bachelor of Divinity degree should register in the Graduate School of Arts and Sciences, through which the degrees of Master of Arts and

Doctor of Philosophy may be obtained. This advanced work is administered through the Department of Religion of the Graduate School and is available to qualified persons of all denominations on an equal basis. Study and research may be pursued in three fields: (1) Biblical Studies; (2) Studies in Church History; and (3) Studies in Christian Thought. A list of courses approved by the Graduate Council for work in these fields, together with general requirements for admission to the Graduate School, may be found in the *Bulletin of the Graduate School*. This Bulletin is available on application to Dean Paul Gross, the Graduate School of Arts and Sciences, Duke University.

A limited number of University Scholarships and Fellowships, among which are three Gurney Harriss Kearns Fellowships of \$1,000 each, may be obtained by exceptionally qualified students. Applications for these must be submitted to Dean Gross on University form blanks not later than March 15 of each year.

Inquiries concerning specific requirements of the Department of Religion in the Graduate School should be addressed to Professor H. Shelton Smith, Director of Graduate Studies in Religion.

#### FACILITIES FOR ADVANCED STUDY IN THE AMERICAN SCHOOLS OF ORIENTAL RESEARCH

The Divinity School of Duke University is one of the supporting members of the American Schools of Oriental Research. Accordingly, students in the Divinity School have the privilege of attending the American School in Jerusalem or the one in Bagdad without charge for tuition. They may also compete for the financial aids which are offered annually by the Schools. These consist of four fellowships, the stipends depending upon available funds.

#### DIVINITY SCHOOL SEMINARS

The Divinity School, under provision of the James A. Gray fund, conducts each year two extension seminars providing two-day study courses for ministers. In 1950-51 these seminars were conducted at Myers Park Methodist Church, Charlotte, N. C., and the First Methodist Church, Wilson, N. C. Lecturers were Bishop Fred P. Corson, Dr. W. D. Davies, and Dr. Kenneth W. Clark.

#### FRANK S. HICKMAN PREACHING PRIZE

The Frank S. Hickman prize in preaching, amounting to \$50.00 in cash for the best sermon preached in an annual contest, was established in 1950.

#### SCHOOL FOR ACCEPTED SUPPLY PASTORS

In cooperation with the Board of Ministerial Training and the Southeastern Jurisdictional Conference of the Methodist Church, the Divinity School conducts a School for Accepted Supply Pastors of the Methodist Church. The School for 1951 is scheduled for July 3-19.

# Cost, Residential Arrangement, and Student Aid



## FEES AND COSTS

THE University tuition charge is \$175 per semester. Scholarships covering this amount are granted to all Divinity School students. Other charges are as follows:

### *Fees per semester:*

General Fee .....	\$ 50.00
Approximate cost of meals per semester .....	175.00
Room per semester (double room) .....	62.50
Total per semester .....	<u>\$287.50</u>

The "General Fee" is in lieu of all special charges, and includes the following Fees: Matriculation, Medical, Library, Damage, Commencement and Diploma. Students may secure admission to all athletic contests held on the University grounds by payment of the Athletic Fee of \$5.00 per semester, plus any Federal taxes that may be imposed.

Due to rising costs, a readjustment in charges, including room rents, is being considered. In the event of an adjustment, applicants will be notified.

## LATE REGISTRATION

Students matriculating in either semester at a date later than that prescribed in the catalogue shall pay to the Treasurer of the University a penalty of \$5.00.

## LIVING ACCOMMODATIONS

A description of dining facilities and living quarters is given in the *Bulletin of the Divinity School*.

## STUDENT AID

Duke University remits its regular tuition charges to all students enrolled in the Divinity School. In recognition of this, students are expected to render occasional services such as teaching of church school classes and responding to calls for particular services. Financial aid, over and above this, is available only in the form of grants-in-aid and work scholarships. Those appointed to such work agree to give ten weeks' service during the summer months to a church to which they are assigned. In return they receive their board and room



for the period of their summer service and amounts varying up to \$600. By special arrangement a student may be assigned to a church for five weeks' work with one-half the stated remuneration. This plan provides an opportunity for earning a large part of the year's expenses, while at the same time assuring the student valuable experience in religious leadership.

In most cases students will be expected to be able to finance themselves for the first semester of work in the Divinity School; those who show that they can carry their school work satisfactorily are then eligible for various forms of financial assistance.

Students who must have additional income over and above their summer's earnings may secure part-time employment during the academic year. They are strongly urged, however, to make their arrangements so that they will not have duties which will prevent their taking the fullest advantage of the educational and cultural opportunities of the Divinity School.

### FIELD WORK SUPERVISION

The Department of Field Work is maintained to help students receiving financial aid to secure work opportunities where they may render service for such aid. Their work will be supervised so that their experiences may be part of their ministerial training. Students are also helped to secure work opportunities for the experience to be gained. All students working under the department have their board, room, laundry, and travel expenses provided by the charge served. Certain courses are required of all students engaged in field work and are designed to prepare students for the work in which they engage. All students assigned to field work must maintain satisfactory grades and attitudes.

### LOAN FUNDS

Divinity School students who have satisfactorily completed one semester's work are eligible to apply for loans from the University Loan Funds. Such applications should be filed on the approved forms in the Office of the Secretary of Duke University within the first week of each semester.

### STUDENT GOVERNMENT ASSOCIATION

Each student of the Divinity School upon enrollment becomes a member of the Student Government Association. Four officers are elected by the student body annually in April to serve for the following year. These officers, the President, Vice-President, Secretary, and Treasurer, along with the Dean of the Divinity School, serve as the Executive Committee, and the committee chairmen constitute the Student Council which meets in monthly session to review and coordinate

the programs of the several committees. It is desired that all students contribute to the corporate life of the School through active participation in the work of the committees. The Association operates on the basis of a unified budget, each student contributing to its support dues in the amount of \$3.00 per semester.

### *Requirements for Admission*

The Divinity School is a fully accredited member of the American Association of Theological Schools, and is one of the ten accredited seminaries of the Methodist Church. Candidates for admission must hold the degree of A.B., based upon four years of work beyond secondary education, in a college which is approved by one of the regional accrediting bodies, or the equivalent of such a degree, and their college records must be such as to indicate their ability to carry on graduate professional studies. They will be admitted without examination on presentation of an official transcript of college and other academic credits which they may have secured. The application of students from foreign countries will be considered, each on its own merits, the general principle being that a training equivalent to that of a baccalaureate degree from an accredited American college must have been secured. Women will be admitted on the same basis as men. The Divinity School accepts students who desire to transfer from other accredited theological schools on the basis of transcripts of their work and honorable dismissal. However, all transfer students will be expected to meet the full requirements of the Divinity School and should recognize the fact that there may be loss of time in conforming to these requirements. Credits will be formally accepted only after the student has spent one semester in the Duke Divinity School. In addition to an adequate academic preparation, applicants must satisfy the Faculty as to their Christian character and purpose. A formal application blank may be secured from the office of the Divinity School. This must be filled out and returned by all candidates for admission. Application for admission should be made as soon as possible after the beginning of the applicant's last semester of college work. Applications received after April 1 cannot be assured of admission or financial aid for the ensuing academic year.

The number of applications for admission to the School is considerably larger than the number of vacancies. In view of this fact, applicants are required on notification of admission to signify their acceptance within two weeks, and to pay an admission fee of \$15.00. This fee is applied to the regular first-term bill if the student matriculates; if he fails to do so, the fee is forfeited. In cases of applicants to whom pre-enrollment is granted for as long as a year prior to the

date of entrance, this fee must be paid not later than six months prior to the date of matriculation.

### ADMISSION ON PROBATION

1. Applicants for admission who are graduates of non-accredited colleges will be considered on their merits, but only those who give evidence of special promise will be admitted. Specifically, such applicants must show that they have attained a superior average (approximately "B") for a four-year college course.

Admission of such persons will, in every case, be *on probation*.

2. Applicants for admission who are graduates of accredited colleges but whose college records do not fully meet Divinity School standards may be admitted *on probation* if their recommendations justify consideration.

Probation means:

a. Students who, during the first year of Divinity School work (thirty semester hours), maintain a consistently low average, including one or more failures, will be required to withdraw from the school.

b. In the case of a student admitted on probation, no credit will be granted toward either the B.D. or the M.R.E. degree for any course in which, during the first year's work (thirty semester hours), a grade of less than "C" (see catalogue section on "grading system") is recorded, unless the student's entire average in the semester during which a "D" grade is received is "C" or better.

c. When the student has been admitted on probation, and is subsequently found to be deficient in the essential requisites of any given area of the "Pre-Seminary Curriculum" (see next section of catalogue), the Divinity School Faculty reserves the right to direct that the student make up such deficiencies by additional courses of study taken in other schools of Duke University in order to qualify for either the B.D. or M.R.E. degree, but without credit for such courses toward those degrees.

### PRE-SEMINARY CURRICULUM

The Divinity School, in substantial agreement with the standards of the American Association of Theological Schools, recommends that prospective candidates for admission keep in mind the desirability of including the following in their undergraduate curriculum:

It is suggested that a student should acquire a total of 90 semester hours or complete approximately three-fourths of his college work in the areas listed below. No work done towards a first college degree may be used towards a Divinity School degree.

<i>Basal Fields</i>	<i>Semester</i>	<i>Sem. Hours</i>
English	6	12-16
Literature, Composition and Speech		
Philosophy	3	6-12
At least two of the following:		
Introduction to philosophy, history of philosophy, ethics, logic		
Bible or Religion	2	4-6
History	3	6-12
Psychology	1	2-3
A foreign language	4	12-16
Greek and Hebrew are especially recommended.		
Natural sciences	2	4-6
Physical or biological		
Social sciences	2	4-6
At least two of the following:		
Economics, sociology, government or political science, social psychology, education.		

Concentration of work, or "majoring," is a common practice in colleges. For such concentration or major, a constructive sequence based upon any one, two, or three of the above fields of study would lead up naturally to a theological course.

Of the various possible areas of concentration, where areas of concentration are required, a major in English, philosophy, or history is regarded to be the most desirable.

### *Requirements for the Degree of Bachelor of Divinity*

During the academic year 1948-49, the curriculum of the Divinity School was extensively revised. By action of the Faculty, all students admitted to the Divinity School as of September 1, 1949, or later, will conform to the requirements for the B.D. degree as printed in this issue of the catalogue. A special committee, consisting of the Dean, the Recorder and Professor Petry, will adjust the curriculum to the rights and needs of all other students.

The plan for the first two years of the revised curriculum went into effect as of September, 1949. The Vocational Groups and the Senior Seminars called for in the work of the third year were put into effect for the year 1950-51.

The requirements for the degree of Bachelor of Divinity are the following:

Completion of ninety semester hours of course work, including the required courses of the Core Curriculum.

The selection, not later than the end of the middle year, of one of

the Vocational Groups, and completion of the special requirements of the Group chosen, including satisfactory completion of the work of one Senior Seminar.

The Core Curriculum, vocational groups, and distribution of courses by years are available in the *Bulletin of the Divinity School*.

Demonstration of a detailed knowledge of the contents of the narrative portions of the English Bible. Examinations for this purpose in Old and New Testament are given each spring.

Students who show deficiencies in English will be required to take special training in addition to meeting the other requirements for the degree. A degree may be withheld on the grounds of English deficiency only.

The course leading to the degree of Bachelor of Divinity is planned to cover three years of normal academic work. In no case will this degree be conferred on a student until he has spent at least two semesters in residence in the Divinity School. This is defined as the completion of thirty semester hours of work, not more than six hours of which may be taken in the Duke University Summer Session.

By special permission a student who has begun his work in Duke Divinity School as a candidate for the B.D. degree may be given credit for not more than 30 semester hours of work taken in another seminary on the approved list of the American Association of Theological Schools. Except in unusual cases, request for such credits must be approved prior to the beginning of work at the other institution. In every such case, however, the final 15 hours of class credit presented for graduation must be done at Duke and must include satisfactory completion of one of the Senior Seminars. No such student will be relieved of any of the requirements for graduation specified in the catalogue of the Duke Divinity School.

Unless all the work offered for the B.D. degree is completed within a period of nine years from the date of beginning, the student will be required to make formal application for re-admission and re-evaluation of his credits in the light of the then-existing curriculum of the Divinity School. Except in unusual cases, work of a fragmentary character taken over a long period of years, or work taken many years before a student is admitted to the Duke Divinity School, will not be accepted for credit toward the B.D. degree.

### GRADING SYSTEM

The grading system of the Divinity School employs the letters A, B, C, D, and F, which have been defined as follows: A = Excellent; B = Good; C = Acceptable; D = Poor; and F = Failure. No percentage equivalents are stated. A student is expected to maintain an average of C.

\* Students doing any kind of field work will choose one of these seminars.

† Additional sections of Speech are available.



The Faculty has voted that in the average course of considerable size, especially core curriculum courses, the total of A and B grades should not run above 33⅓%. In all courses where the instructor considers attendance a necessary part of the work of the course, a student may not receive a grade of over C if his absences total 12% of the regular class periods, and if the absences total 24% of the class periods he may not receive credit for the course.

Grades of Incomplete received at the end of the fall semester must be removed by the completion of the work of the course not later than March 15. Grades of Incomplete received at the end of the spring semester must be removed by October 1. If the work of the course is not completed by these dates, the grade shall be recorded as "F."

No student shall be permitted to drop a course after the expiration of one-third the period of instruction of the course without incurring failure except for causes adjudged by the Dean to be beyond the student's control.

### *Requirements for the Degree of Master of Religious Education*

(Requirements for this degree are being revised. Beginning in September, 1952, sixty semester hours will be required. From one-fourth to one-third of this will be given to practice training. In view of these contemplated changes no applicants will be admitted who cannot show that they can complete all present requirements by September 1, 1952.)

The course of study leading to this degree is designed to provide training primarily for individuals desiring to become educational assistants in churches or to engage in other forms of Christian education.

Candidates for this degree must hold the degree of A.B., based upon four years of work beyond secondary education, in a college which is approved by one of the regional accrediting bodies, or the equivalent of such a degree, and with academic and personal records which afford promise of competence in this area of service. The course of study will be especially useful for individuals who had one or more years of experience in religious education and desire further training. Candidates for this degree will be limited in number, and individuals interested are urged to apply for admission well in advance of the opening of the academic year. All work offered for this degree, whether in the regular year or in summer sessions, must be completed within a period of six years from the date of beginning. Only a limited amount of work may be taken in the Duke University Summer Session.

Certain prerequisite studies must have been taken by the candidate during the course of his academic training or must be secured, without credit toward the M.R.E. degree, after being admitted to the Divinity School. These are the following:

General Psychology	6 s.h.
Sociology, or approved equivalent	6 s.h.
Biblical Studies (including work in both the Old and the New Testament)	6 s.h.

Thirty semester hours of academic work are required for graduation. Eighteen of the semester hours must be in the following fields:

Religious Education	6 s.h.
Psychology of Religion	3 s.h.
Christian Ethics, or History of Religions	3 s.h.
Biblical Studies	6 s.h.

The candidate must also engage in practice teaching in a church school or undertake some other approved project and must submit a written report covering his practical experience. This project work and report will be under the supervision of the Department of Religious Education.

# Courses of Instruction\*



UNLESS otherwise indicated odd numbers indicate fall semester courses; even numbers indicate spring semester courses. Required courses of the Core Curriculum and Senior Seminars are numbered from 11 to 99. Elective courses carrying credit in the Divinity School only are numbered from 101 to 199. Courses approved for credit in both the Divinity School and the Graduate School of Arts and Sciences are numbered above 200. Lists of courses to be offered in any semester will be available at the time of each registration.

## *I. Biblical Studies*

### OLD TESTAMENT

- |  |                 |
|--|-----------------|
| 11. (Formerly 203.) INTRODUCTION TO THE OLD TESTAMENT.—4 s.h.                      | MR. STINESPRING |
| 12. (Formerly 204.) PSALMS, WISDOM LITERATURE, AND THE PROBLEM OF THEODICY.—2 s.h. | MR. BROWNLEE    |
| 201-202. FIRST HEBREW.—6 s.h.  | MR. STINESPRING |
| 205-206. ARABIC.—6 s.h.  | MR. STINESPRING |
| 207-208. SECOND HEBREW.—6 s.h.   | MR. BROWNLEE    |
| 301. THE RELIGIOUS THOUGHT OF POST-EXILIC JUDAISM.—Prerequisite: O.T. II. 3 s.h.   | MR. BROWNLEE    |
| 304. ARAMAIC.—3 s.h.   | MR. STINESPRING |
| 305. THIRD HEBREW.—3 s.h.<br>[Offered in the second semester]                      | MR. BROWNLEE    |
| 306. ADVANCED HEBREW.—3 s.h.   |                 |
| 307. SYRIAC.—Some knowledge of Hebrew and Aramaic prerequisite. 3 s.h.             | MR. STINESPRING |
| 309. HISTORY OF THE ANCIENT NEAR EAST.—3 s.h.                                      | MR. STINESPRING |
| 310. OLD TESTAMENT PROPHECY.—Prerequisite: O.T. II. 3 s.h.                         | MR. STINESPRING |

---

\*HISTORY OF ART 215. RELIGIOUS ART OF THE ANCIENT NEAR EAST.—3 s.h. MR. MARKMAN

\*HISTORY OF ART 216. RELIGIOUS ART OF THE CLASSICAL WORLD.—3 s.h. MR. MARKMAN

\* On recommendation of the Dean, courses offered in the Graduate School of Arts and Sciences other than those approved for credit in the Divinity School may be approved for credit in individual cases, provided no equivalent course is offered in the Divinity School; each case to be decided on its merits.

\* Course offered in the Graduate School of Arts and Sciences which is credited toward the degree of Bachelor of Divinity.

## NEW TESTAMENT

18. (Formerly 213.) EARLY CHRISTIAN LIFE AND LITERATURE.—4 s.h.  
MR. CLARK
19. (Formerly 214.) INTRODUCTION TO NEW TESTAMENT THEOLOGY.—  
Prerequisite: N.T. 18. 2 s.h. MR. DAVIES
- 103-104. (Formerly 211-212.) HELLENISTIC GREEK.—6 s.h., provided the student takes three additional semester hours in New Testament Greek. MR. DAVIES
105. (Formerly 219.) LIFE OF PAUL.—3 s.h. MR. MYERS
109. (Formerly 216.) HISTORY OF THE ENGLISH BIBLE.—3 s.h. MR. CLARK
217. THE NEW TESTAMENT IN GREEK.—Prerequisite: six semester hours' study of the Greek language. 3 s.h. MR. CLARK
218. GALATIANS AND 1 CORINTHIANS.—Prerequisite: six semester hours' study of the Greek language. 3 s.h. MR. CLARK
220. 1 PETER AND THE GOSPEL OF JOHN.—Prerequisite: six semester hours' study of the Greek language. 3 s.h. MR. DAVIES
311. THE LIFE AND TEACHINGS OF JESUS.—Prerequisite: N.T. 18. 3 s.h.  
MR. CLARK
312. ADVANCED NEW TESTAMENT THEOLOGY.—Prerequisite: N.T. 19. 3 s.h.  
[Offered in the first semester]
313. APOSTOLIC FATHERS.—Prerequisite: N.T. 18. 3 s.h. MR. CLARK
314. (Formerly 317.) PATRISTIC THOUGHT.—Prerequisite: N.T. 19. 3 s.h.  
MR. DAVIES
316. HELLENISTIC RELIGIONS.—Prerequisite: N.T. 18. 3 s.h. MR. CLARK
317. (Formerly 320.) THE SYNOPTIC GOSPELS.—Prerequisite: N.T. 18. 3 s.h.  
MR. CLARK
318. TEXT OF NEW TESTAMENT.—Prerequisite: N.T. 18 and a reading knowledge of Greek. 3 s.h. MR. CLARK
319. PAUL AND RABBINIC JUDAISM.—3 s.h. MR. DAVIES
- \*GREEK 257.—3 s.h. MR. ROGERS
- \*LATIN 258.—3 s.h. MR. ROGERS

*II. Historical Studies*

## HISTORY OF RELIGION AND MISSIONS

15. (Formerly 281.) LIVING RELIGIONS OF THE WORLD.—3 s.h.  
MR. CANNON
24. (Formerly 282.) MISSIONS.—2 s.h. MR. CANNON
108. (Formerly 284.) COMPARATIVE RELIGION I.—Prerequisite: H.R. 15. 3 s.h. MR. CANNON
110. (Formerly 286.) COMPARATIVE RELIGION II.—Prerequisite: H.R. 15. 3 s.h. MR. CANNON
112. (Formerly 288.) THE RELIGIONS OF INDIA.—3 s.h. MR. CANNON
113. (Formerly 283.) THE RELIGIONS OF THE FAR EAST.—3 s.h.  
MR. CANNON

\* Course offered in the Graduate School of Arts and Sciences which is credited toward the degree of Bachelor of Divinity

115. (Formerly 289.) BUDDHISM.—Prerequisite: H.R. 15. 2 s.h. MR. CANNON  
 117. (Formerly 287.) MOHAMMEDANISM.—Prerequisite: H.R. 15. 2 s.h.  
 MR. CANNON

### CHURCH HISTORY

13. (Formerly 233.) HISTORY OF THE PRE-REFORMATION CHURCH.—  
 4 s.h. MR. PETRY  
 14. (Formerly 234.) HISTORY OF THE REFORMATION AND POST-  
 REFORMATION CHURCH.—2 s.h. MR. SCHAFER  
 136. (Formerly 337.) PRE-REFORMATION PREACHING.—Prerequisite: C.H.  
 13. 2 s.h. MR. PETRY  
 137. (Formerly 336.) RELIGIOUS LEADERS IN CHRISTIAN HISTORY.—  
 Prerequisite: C.H. 13. 2 s.h. MR. PETRY  
 138. GREAT BOOKS IN CHRISTIAN HISTORY.—3 s.h. MR. PETRY  
 [Not offered in 1951-1952]  
 139. (Formerly 339.) METHODISM.—Prerequisite: C.H. 13. 2 s.h. MR. PETRY  
 [Offered in the second semester]  
 198. THE HERITAGE OF THE REFORMATION.—3 s.h. MR. SCHAFER  
 330. THE CHURCH IN EUROPE SINCE 1800.—3 s.h. MR. PETRY  
 331. THE SOCIAL MESSAGE OF THE EARLY AND MEDIEVAL CHURCH.—  
 Prerequisite: C.H. 13 and 14. 3 s.h. MR. PETRY  
 332. THE MEDIEVAL CHURCH.—Prerequisite: C.H. 13 and 14. 3 s.h.  
 MR. PETRY  
 334. CHURCH REFORMERS AND CHRISTIAN UNITY.—Prerequisite: C.H.  
 13 and 14. 3 s.h. MR. PETRY  
 336. (Formerly 333.) A HISTORY OF CHRISTIAN RENUNCIATION IN THE  
 MIDDLE AGES.—Prerequisite: C.H. 13 and 14. 3 s.h. MR. PETRY

### AMERICAN RELIGIOUS THOUGHT

28. (Formerly 296.) MOVEMENTS IN AMERICAN RELIGIOUS THOUGHT.—  
 3 s.h. MR. SMITH  
 199. THE AMERICAN SOCIAL GOSPEL.—3 s.h. MR. SMITH  
 395. RELIGIOUS THOUGHT IN COLONIAL AMERICA.—3 s.h. MR. SMITH  
 396. AMERICAN RELIGIOUS THOUGHT IN THE NINETEENTH CEN-  
 TURY.—3 s.h. MR. SMITH  
 397. CURRENT AMERICAN THEOLOGY.—3 s.h. MR. SMITH  
 398. MODERN AMERICAN CHRISTOLOGY.—3 s.h. MR. SMITH  
 495. SEMINAR: JONATHAN EDWARDS AND JOHN WESLEY.—2 s.h.  
 MR. SMITH  
 498. SEMINAR: REINHOLD NIEBUHR AND PAUL TILLICH.—2 s.h.  
 MR. SMITH

## *III. Theological Studies*

### PHILOSOPHY OF RELIGION

119. (Formerly 229.) INTRODUCTION TO PHILOSOPHY OF RELIGION.—  
 2 s.h.  
 121. PHILOSOPHY OF CONTEMPORARY THEISM.—2 s.h.



122. THE PHILOSOPHY OF NATURALISTIC THEISM.—Prerequisite: consent of instructor. 2 s.h.

123. THEORIES OF VALUE: A GENERAL COURSE.—2 s.h.

124. THE PHILOSOPHY OF PERSONALISM.—Prerequisite: consent of instructor. 2 s.h.

382. RELIGIOUS KNOWLEDGE.—Prerequisite: P.R. 119 or consent of instructor. 2 s.h.

### CHRISTIAN THEOLOGY

20. (Formerly 221.) INTRODUCTION TO CHRISTIAN THEOLOGY.—4 s.h.  
Mr. CUSHMAN

21. (Formerly 222.) INTRODUCTION TO THE HISTORY OF CHRISTIAN DOCTRINE.—Prerequisite: C.T. 20. 2 s.h.  
Mr. SCHAFER

107. (Formerly 329.) THE PERSON AND WORK OF CHRIST.—Prerequisite: C.T. 20. 2 s.h.  
Mr. CUSHMAN

129. SEMINAR IN HISTORICAL THEOLOGY.—Prerequisite: C.T. 21. 2 s.h.  
[Offered in the second semester] Mr. SCHAFER

224. (Formerly 323.) CONCEPTIONS OF MAN IN WESTERN THOUGHT.—Prerequisite: 3 s.h. in Christian Doctrine or 6 s.h. in Philosophy. Mr. CUSHMAN

321. PLATONISM AND CHRISTIANITY.—Prerequisite: permission of instructor. 3 s.h.  
Mr. CUSHMAN

322. THEOLOGY AND PHILOSOPHY IN THE NINETEENTH CENTURY.—Prerequisite: C.T. 20. 3 s.h.  
Mr. CUSHMAN

323. HISTORY OF CHRISTIAN THOUGHT I.—3 s.h. Mr. SCHAFER

324. HISTORY OF CHRISTIAN THOUGHT II.—3 s.h. Mr. SCHAFER

325. PHILOSOPHICAL THEOLOGY I.—Prerequisite: C.T. 20. 3 s.h.  
Mr. CUSHMAN

326. PHILOSOPHICAL THEOLOGY II.—3 s.h. Mr. CUSHMAN

328. (Formerly 321B.) SEMINAR IN TWENTIETH-CENTURY CONTINENTAL AND BRITISH THEOLOGY.—3 s.h.  
Mr. CUSHMAN

See also NEW TESTAMENT 312.—ADVANCED NEW TESTAMENT THEOLOGY.

### CHRISTIAN ETHICS

27. (Formerly 291.) CHRISTIAN ETHICS I.—3 s.h. Mr. BEACH

114. (Formerly 292.) CHRISTIAN ETHICS II.—Prerequisite: C.E. 27. 2 s.h.  
Mr. BEACH

193. THE CHRISTIAN INTERPRETATION OF HISTORY.—Prerequisite: C.E. 27. 3 s.h.  
Mr. BEACH

391. HISTORICAL TYPES OF CHRISTIAN ETHICS I.—Prerequisite: C.E. 27 or its equivalent. 3 s.h.  
Mr. BEACH

392. HISTORICAL TYPES OF CHRISTIAN ETHICS II.—Prerequisite: C.E. 391. 3 s.h.  
Mr. BEACH

394. CHRISTIANITY AND THE STATE.—Prerequisite: C.E. 27. 3 s.h.  
Mr. BEACH

*238. RACE AND CULTURE.	MR. THOMPSON
*249. CHILD WELFARE.	MR. JENSEN
*250. MARRIAGE AND THE FAMILY.	MR. HART
*276. CRIMINOLOGY.	MR. JENSEN
*382. HISTORY OF SOCIOLOGICAL THEORY.	MR. JENSEN

### PSYCHOLOGY OF RELIGION

22. (Formerly 271.) PSYCHOLOGY OF RELIGION.—3 s.h.	MR. HICKMAN
125. (Formerly 272.) ADVANCED PSYCHOLOGY OF RELIGION.—3 s.h.	MR. HICKMAN
127. (Formerly 373.) PSYCHOLOGY OF PREACHING.—2 s.h.	MR. HICKMAN
128. (Formerly 374.) PASTORAL PSYCHOLOGY.—2 s.h.	MR. HICKMAN
129. (Formerly 375.) GENETIC PSYCHOLOGY OF RELIGION.—3 s.h.	MR. HICKMAN
130. (Formerly 376.) STUDIES IN MYSTICISM.—3 s.h.	MR. HICKMAN

## *IV. Practical Studies*

The Core Curriculum sequence, Consolidated Course in Christian Leadership, comprises the following courses in the Division of Practical Studies, each of which is listed in its appropriate department:

P.T. 23. CHURCH ADMINISTRATION I.—2 s.h.

R.E. 25. EDUCATIONAL THEORY AND PRACTICE IN THE CHURCH.—2 s.h.

H.R. 24. MISSIONS.—2 s.h.

P.C. 26. INTRODUCTION TO PASTORAL CARE.—2 s.h.

### PRACTICAL THEOLOGY

23. (Formerly 252.) CHURCH ADMINISTRATION I.—2 s.h.	MR. WALTON
142. (Formerly 253.) FIELD WORK I—GENERAL.	MR. WALTON
144. (Formerly 254.) FIELD WORK II—RURAL.—1 s.h.	MR. WALTON
145. FIELD WORK—URBAN.—1 s.h.	
146. CHURCH ADMINISTRATION II.—2 s.h.	MR. WALTON
147. THE URBAN COMMUNITY AND ITS CHURCH.—2 s.h.	
148. CHURCH FINANCE.—1 s.h.	MR. WALTON
[Not offered in 1951-52]	
149. PARISH AND COMMUNITY RESEARCH AND ANALYSIS.—1 s.h.	MR. WALTON
150. THE RURAL PASTOR AND HIS WORK.—2 s.h.	MR. WALTON
151. (Formerly 353.) THE RURAL CHURCH.—2 s.h.	MR. WALTON
152. (Formerly 354.) PARISH EVANGELISM.—2 s.h.	MR. WALTON
153. CHURCH MANAGEMENT AND SUPERVISION.—1 s.h.	MR. WALTON
154. (Formerly 356.) THE URBAN CHURCH.—2 s.h.	

\* Course offered in the Graduate School of Arts and Sciences which is credited toward the degree of Bachelor of Divinity. For a description of the course, see the catalogue of the Graduate School.

155. (Formerly 357.) CHURCH POLITY: COMPARATIVE AND DENOMINATIONAL.—2 s.h. MR. WALTON AND OTHERS

157. RURAL COMMUNITY AND CHURCH TRENDS.—1 s.h. MR. WALTON

### RELIGIOUS EDUCATION

25. (Formerly 261.) EDUCATIONAL THEORY AND PRACTICE IN THE CHURCH.—2 s.h. MR. SPENCE

161. THEORIES, TYPES AND TECHNIQUES OF TEACHING.—2 s.h. MR. SPENCE

162. (Formerly 262.) METHODS AND MATERIALS OF RELIGIOUS EDUCATION.—3 s.h. MR. SPENCE

163. (Formerly 363.) WORSHIP AND DRAMA.—3 s.h. MR. SPENCE

164. RELIGIOUS EDUCATION OF CHILDREN AND ADOLESCENTS.—2 s.h. MR. SPENCE

166. RELIGIOUS EDUCATION OF YOUNG PEOPLE AND ADULTS.—2 s.h. MR. SPENCE

168. (Formerly 366.) THE EDUCATIONAL AND SPIRITUAL VALUES OF GREAT LITERATURE.—3 s.h. MR. SPENCE

365. HISTORY OF RELIGIOUS EDUCATION IN MODERN TIMES.—3 s.h. MR. SPENCE

368. THEORIES OF RELIGIOUS EDUCATION.—3 s.h. MR. SPENCE

### PASTORAL CARE

26. (Formerly 251.) INTRODUCTION TO PASTORAL CARE.—2 s.h. MR. DICKS

170. SEMINAR IN PASTORAL CARE.—Prerequisite: P.C. 26 or consent of instructor. 3 s.h. MR. DICKS

171. (Formerly 255.) PASTORAL CARE PRACTICUM I.—Prerequisite: P.C. 26 or consent of instructor. 3 s.h. MR. DICKS

172. (Formerly 256.) PASTORAL CARE PRACTICUM II.—Prerequisite: P.C. 26 or P.C. 171. 3 s.h. MR. DICKS

173. RELIGION AND HEALTH.—Prerequisite: P.C. or consent of instructor. 2 s.h. MR. DICKS

174. PERSONAL COUNSELING.—2 s.h. MR. DICKS

175. (Formerly 351.) THE LITERATURE OF PASTORAL CARE.—Prerequisite: consent of instructor. 2 s.h. MR. DICKS

176. PASTORAL CARE AND SOCIAL WORK.—2 s.h. MR. DICKS

177. ADVANCED SEMINAR IN PASTORAL CARE.—Prerequisite: P.C. 26 or consent of instructor. 3 s.h. MR. DICKS

### PREACHING

29-30. SERMON CONSTRUCTION—THEORY AND PRACTICE.—4 s.h. MR. CLELAND

181. (Formerly 244.) PRACTICAL PROBLEMS IN PREACHING.—Prerequisite: Pr. 29 and 30. 2 s.h. MR. CLELAND

183. (Formerly 346.) MATERIALS OF PREACHING—BIBLICAL.—2 s.h. MR. CLELAND

185. (Formerly 348.) MATERIALS OF PREACHING—NON-BIBLICAL.—2 s.h. MR. CLELAND

See also: C.H. 136. PRE-REFORMATION PREACHING.

Psy.R. 127. PSYCHOLOGY OF PREACHING.

## PUBLIC WORSHIP

178. (Formerly 355.) PUBLIC WORSHIP.—3 s.h. MR. CLELAND AND MR. RUBIN  
 180. (Formerly 358.) CHURCH MUSIC.—2 s.h. MR. BARNES

## SPEECH

(Four Sections)

17. (Formerly 241.) EFFECTIVE SPEAKING.—2 s.h. MR. RUBIN  
 132. (Formerly 242.) PUBLIC SPEAKING.—2 s.h. MR. RUBIN  
 134. (Formerly 246.) ORAL INTERPRETATION OF LITERATURE.—Pre-requisite: Speech 17. 2 s.h. MR. RUBIN

*V. Senior Seminars*

In the third year each B.D. candidate will take one Senior Seminar, yielding 2 s.h. credit. No student may enroll in more than one Senior Seminar without special permission of the Dean. Juniors and Middlers are not eligible for credit. Senior Seminars will not yield Graduate School credit.

Enrollment in each Senior Seminar shall be normally not more than twelve. No Senior Seminar need be conducted for an enrollment of less than 5 students. Each Senior Seminar will be in charge of a Chairman. Not less than two instructors will participate in each Seminar. General supervision of all Senior Seminars will be exercised by a standing committee of the Faculty.

The work done in each Senior Seminar should be equivalent to that done in a normal 2 s.h. course, with reading based upon a prepared reading list and a substantial paper or written project report.

## FIRST SEMESTER

61. THE CHRISTIAN FAITH AND ITS PROCLAMATION.—2 s.h.  
 MR. CLELAND, MR. BEACH, MR. RUBIN  
 63. THE ECUMENICAL MOVEMENT IN THE MODERN CHURCH.—2 s.h.  
 MR. SMITH, MR. CANNON, MR. SCHAFER  
 65. PRACTICAL VALUES OF BIBLICAL RESEARCH.—2 s.h.  
 MR. CLARK, MR. BROWNLEE  
 67. THE NEW TESTAMENT AS MATERIALS FOR TEACHING.—2 s.h.  
 MR. SPENCE, MR. DAVIES, MR. DICKS

## SECOND SEMESTER

62. WESTERN CHRISTIANITY AND NON-CHRISTIAN FAITHS.—2 s.h.  
 MR. PETRY, MR. CANNON, MR. SCHAFER  
 64. THE OLD TESTAMENT AS MATERIALS FOR TEACHING.—2 s.h.  
 MR. SPENCE, MR. STINESPRING  
 66. THE CHRISTIAN CHURCH AND SOCIAL CHANGE.—2 s.h.  
 MR. BEACH, MR. SMITH, MR. PETRY  
 68. CHRISTIAN EXPERIENCE AND CONTEMPORARY CHURCH LIFE.—2 s.h.  
 MR. HICKMAN, MR. WALTON, MR. MYERS





# THE SCHOOL OF LAW

Fall Semester begins September 20, 1951

Spring Semester begins January 28, 1952

# The School: Its Purposes and Methods



BUILT on the foundation of the School of Law of Trinity College, with its history of legal instruction running back to the middle of the past century, the Duke University School of Law was established in 1924. In 1930 the School was moved into its present building, the Faculty and library were greatly increased, and the activities of the School broadened. The School of Law is a member of the Association of American Law Schools and is on the "Approved List" of the American Bar Association. More than thirty states and eighty-three institutions of higher learning are represented in its student body.

The curriculum of the School of Law provides thorough preparation for the practice of law in any state; its graduates have been admitted to the bar in over forty states and the Territory of Hawaii. Opportunities for specialization in particular branches of the law are afforded.

In carrying out the trust imposed by the indenture establishing the Duke Endowment, the School of Law seeks to have the student acquire knowledge and comprehension not only of legal doctrine, but also of the judicial process and of the social, economic, and political problems with which law and lawyers must deal. The method of instruction employed compels analysis of judicial opinions and inquiry into the non-legal as well as the legal considerations which underlie them. In appropriate courses, special consideration is given to the work of the legislative and administrative agencies of government. In recognition of the increasing importance of the role of the lawyer in representing private interests before government agencies and in government service, an unusually broad program is offered in the public law field. Scope for creative student work is provided by seminar courses and supervised individual study and research.

Practical training is not left for the first years of practice. A carefully integrated series of courses is designed to give students actual experience in the work of lawyers. Legal research and writing courses and moot court work in the first and second years are followed in the third by seminar courses emphasizing legal planning and drafting and by practice courses and work in the Legal Aid Clinic. A student bar association affords a means whereby the student may gain acquaintance with the professional organizations through which a lawyer may and should contribute to the well-being of his profession and of society.

For a description of the facilities and activities of the School see the *Bulletin of the School of Law*.

# Admission, Registration, and Fees



## *Admission*

### DIRECTIONS TO APPLICANTS FOR ADMISSION

**A**PPPLICATION must be made on the prescribed Law School application blank which will be sent upon request. No application can be finally passed upon until all required documents are on file. These documents are: (1) the application itself, to which a recently made personal photograph should be attached; (2) a complete transcript of record and evidence of graduation or right to honorable withdrawal from the institution from which credit is offered; (3) letters from (a) a responsible official of the college attended, (b) a responsible person in the applicant's home community, and (c) the applicant himself, in his own handwriting, containing a statement of his general activities, and intellectual interests with special reference to reasons for wishing to attend law school; (4) a report of the applicant's score on the Law School Admission Test described below.

The Law School seeks to select students who give promise of leadership in some of the various phases of professional activity. Applicants for admission and their sponsors are requested to keep this fact in mind.

The Law School Admission Test, referred to above, is administered by the Educational Testing Service and is participated in by a number of the leading law schools of the country. It is given four times a year at examination centers conveniently located throughout the United States. No special preparation for the test is necessary, since it is designed to measure aptitudes rather than knowledge of subject matter. The applicant's score on the test will be considered along with other data in passing upon his admission to the Law School. Application forms and information concerning the test should be procured by writing directly to the Educational Testing Service, P.O. Box 592, Princeton, New Jersey.

### TIMES OF ADMISSION

Beginning students may enter only at the opening of the Fall semester in any year. Students who have complete the first year of law study at this or any other law school approved by the Association of American Law Schools may enter at the beginning of any semester.

## REQUIREMENTS FOR ADMISSION

An application for admission as a candidate for the degree of Bachelor of Laws may be submitted by any person (1) who is a graduate of a college of approved standing, or (2) who has completed in a college of approved standing work equivalent in number of units to three-fourths of that required for graduation and whose college work in its entirety shows an average grade equal to that required for graduation, the requirement in each case being determined by the regulations of the college where the work was taken.

Special provisions for the admission of veterans, whereby military service may be substituted for one year of the three years of college required for admission, are stated below.

## VETERANS' ADMISSION REQUIREMENTS

Any person who enters the School prior to the Fall of 1952 and who served in active military or naval service on or after September 16, 1940, and prior to the termination of the war, and who has been discharged or released therefrom under conditions other than dishonorable and who either has served ninety days or more (exclusive of any period he was assigned for a course of education or training under the Army Specialized Training Program or the Navy College Training Program), or has been discharged or released from active service by reason of an actual service-incurred injury or disability, may substitute such term of service for one year of the three years of college required for admission. Academic credits will be recognized if gained through examinations on work of college grade pursued while in the military or naval service, if such work is given credit by an approved college; such credits, however, may not exceed one year of the required two years of college study.

The Duke University School of Law has been approved by the Veterans Administration for law study under the provisions of the Vocational Rehabilitation Act, Public Law 16, and the Servicemen's Readjustment Act of 1944, Public Law 346, often referred to as the "G.I. Bill of Rights." An office is maintained at the University for the handling of the interests of the many students studying under the supervision of the Veterans Administration.

## COMBINED COURSE

A number of colleges, upon application by their students, have permitted those who have completed three years of undergraduate work to enter the Law School of Duke University and upon the satisfactory completion of the first year of law school work to receive their Bachelor of Arts degree from such colleges. It is suggested that students desiring to enter Duke University School of Law make inquiry of their proper college authorities regarding this point.

A student from an undergraduate college of Duke University who has completed therein three years of study may apply to that college to enroll in a combined course wherein his first year of law study may be accepted toward the Bachelor of Arts degree, and, upon the completion of four additional semesters of law study, he will receive the Bachelor of Laws degree.

### ADMISSION TO ADVANCED STANDING

Any person who has complied with the requirements for admission set forth in this announcement prior to the commencement of his law study, who presents evidence of the satisfactory completion of at least one year of study at any law school which is a member of the Association of American Law Schools, and who is eligible for readmission to the law school from which he proposes to transfer, may be admitted to advanced standing, subject to such rules as would be applicable to students in this School having a comparable scholastic record. Provisional credit for courses so completed will be given, final credit being conditioned on the completion of at least one full year of law study in this School with an average at least five points above the passing grade. Adjustment of credit for work done in such other law schools may be made by the Dean or by vote of the Faculty.

### CANDIDATES FOR GRADUATE DEGREES

Applications for admission to graduate study should be addressed to the Dean of the Law School and should include transcripts of records of legal and pre-legal work.

### *Registration*

Registration must be completed on the first day of each semester. Instruction will begin in all classes on the following day. The applicant must obtain from the Dean of the Law School an admission card, indicating that he is entitled to register. Registration is conducted in the Law Building. All students, both old and new, are required to register at the beginning of each semester, at which time class schedules and course cards must be filled out and approved. Students who register in any semester at a date later than that prescribed are required to pay to the Treasurer of the University a penalty of \$5.00 for late registration unless excused therefrom. A student's registration for any semester is not complete until he has paid the tuition and fees for that semester. The \$5.00 penalty for late registration will be imposed, therefore, unless the student has paid his tuition and fees by registration day.



## REGISTRATION FOR BAR EXAMINATION

Many states now require that a student, prior to or shortly after beginning the study of law, register with the board of bar examiners of the state if he intends to practice therein. Each student should write to the secretary of the board of bar examiners of the state in which he plans to practice and ascertain if that state makes this requirement.

## CONDUCT OF STUDENTS

All students are admitted subject to the rules of the University and of the School of Law, and continuance in the School is conditioned upon the observance of such rules.

The University expects of its students loyal and hearty co-operation in developing and maintaining high standards of conduct as well as of scholarship. The University, therefore, reserves the right, and matriculation by the student is a concession of this right, to compel the withdrawal of any student whose conduct at any time is not satisfactory to the University.

*Fees and Expenses*

Tuition fees are due at the beginning of each semester. The tuition fee is \$175.00 a semester. In addition, a general fee of \$50.00 per semester is required in lieu of separate fees for matriculation, medical service, and the like.

The admission of an applicant is not final until he deposits the sum of \$25.00 with the Treasurer of the University. This deposit will not be returned. It will be credited to the account of the student or, if the student is entitled to the benefits of the Servicemen's Readjustment Act or the Vocational Rehabilitation Act, it will be refunded upon his matriculation.

An athletic fee of \$5.00, plus any Federal taxes that might be imposed, payable at the beginning of each Fall and Spring semester, is optional. Payment of the athletic fee entitles the student to admission to all athletic events on the campus.

The payment of the general fee entitles the student to full medical and surgical care, with the exceptions noted below. This service is under the direction of the University Physician with the co-operation of the staff of Duke Hospital. It includes hospitalization, medical and surgical care, drugs, dressings, X-ray studies, and ward nursing. A charge for board is made at the same rate as in the University dining halls. Refraction of eyes, treatment of teeth and of all chronic conditions, such as the removal of diseased tonsils, are not included in this

service. The cost of any necessary braces and orthopedic appliances, as well as of special nursing, must be borne by the student.

Due to rising costs it may be necessary to consider some readjustment of charges. In the event of an adjustment applicants will be notified.

A statement relative to scholarships, fellowships, and loan funds appears in the *Bulletin of the School of Law*.

### LIVING ACCOMMODATIONS

A description of dining facilities and living quarters is given in the *Bulletin of the School of Law*.

### LAWS REGARDING PAYMENTS

The Executive Committee of Duke University has enacted the following regulations which govern the payment of all fees due the University:

1. The President and the Treasurer of the University have no authority to suspend or in any way alter these regulations.

2. Any student who has failed to pay his bills on the dates advertised in the catalogue is denied the right to attend classes until his account is settled in full; subsequent withdrawal does not entitle a student to a refund.

3. No student is considered by the Faculty as an applicant for graduation until he has settled with the Treasurer for all his indebtedness to the University.

4. No student who has not settled all his bills with the Treasurer of the University is allowed to stand the midyear or final examinations of the academic year.

When a student wishes his bills sent to his parents or guardian, the student or his parent or guardian must so notify the Treasurer of the University in writing in due time, but this in no way releases the student from liability to established penalties, if his bills are not paid on the dates advertised.

---

Further information will be sent upon request. Address

THE DEAN OF THE SCHOOL OF LAW

DUKE UNIVERSITY

Durham, North Carolina

# Bachelor of Laws Degree



UPON favorable recommendation of the Faculty, the degree of Bachelor of Laws will be conferred on students who shall have successfully completed six semesters' study of law, the last two semesters of work immediately preceding the granting of such degree having been completed in this School.

A student shall be deemed to have completed successfully six semesters' study of law if during this period he has

(1) secured a passing grade in courses aggregating seventy-eight semester hours;

(2) secured in every required course a grade not requiring repetition thereof; and

(3) secured a weighted average at least five points above passing in all work taken other than first-year courses, or, if the grade in such work is lower than that above specified, an average grade of five points above passing in all work taken.

Students who have spent only their last two semesters of study in residence in this School must have received a weighted average at least five points above passing for that year.

## MINIMUM AND MAXIMUM STUDENT LOADS

No regular student is permitted to take less than ten course hours per semester. No first-year student is permitted to take courses in excess of the first-year program.

Second- and third-year students are not permitted to take for credit more than fifteen course hours per semester; nor to audit and take for credit more than sixteen course hours per semester. In exceptional cases, students may petition the Faculty for permission to take more or less than the prescribed maximum or minimum loads.

## STANDARDS OF SCHOLARSHIP

GRADES.—The final grades in each course are given in numerical terms which are equivalent to letter grades according to the following scale: 80 to 100, A; 70-79, B; 55-69, C; 50-54, D; 0-49, F.

A grade of 50 is necessary for passing a course. Where a grade below 50 is given a student in any required course, the course must be repeated if the instructor reports the grade with the notation "must

repeat." When a student is required by the instructor to repeat a course which he has failed, the grade given after such repetition supersedes the previous grade in the course.

**ELIGIBILITY TO CONTINUE LAW STUDY.**—Any student who at the end of his first year or at the end of any subsequent semester, has an average grade lower than 50 on all the work then taken is ineligible to continue his work in the School. Any other student (1) whose average final grade at the end of his first semester is below 50, or (2) whose average grade at the end of any subsequent semester on all the work then taken is below 55, or (3) who in any single semester or in any single year receives failure grades in courses totaling eight or more semester hours, may at any time be declared by the Dean ineligible to continue.

**NOTIFICATION OF UNSATISFACTORY SCHOLASTIC STANDING.**—Every student subject to the provisions of the second sentence of the paragraph above, who has not been declared ineligible to continue his work in the School will be given a formal, written notice by the Dean's Office. This notice will set forth his average grade or grades and inform him (1) that he will be subject for the ensuing year to the special supervision of the Dean who may order his dismissal from the School in the event of his failure to maintain a satisfactory scholastic standard, and (2) that he will be ineligible to receive a degree unless his work meets the scholastic requirements for graduation which will be set forth in full in such notice.

Every other student whose average final grade at the end of any semester on the work of that semester, or on all work then taken, does not exceed the minimum average grade required for graduation by more than two points will be given a notice similar to that provided for above.

# Graduate Work in Law



## *Objectives of the Graduate Study Program*

THE graduate program of the School of Law is framed with a view to the encouragement and recognition of legal scholarship. It is addressed to the needs of those who have objectives consistent with the purposes of graduate legal education. It provides training for the qualified student who aspires to a teaching career, or who wishes to become proficient in a special field of the law, to do serious legal research, to prepare himself for a public law practice in or out of government, or to acquire a broader and deeper legal education than the undergraduate curriculum offers.

## *Master of Laws*

### ADMISSION TO CANDIDACY FOR THE DEGREE OF MASTER OF LAWS

Any person who has received the first degree in law from a law school qualified for membership in the Association of American Law Schools may be admitted as a candidate for the degree of Master of Laws, provided he satisfies the Committee on Graduate Study that his objective in desiring to do graduate work in law is consistent with the purposes for which the program is offered, and provided he demonstrates to the Committee, on the basis of his law school record, his capacity to take and profit by graduate work in law. In exceptional cases an applicant who does not meet the above requirements may, on vote of the Faculty, be admitted to candidacy for this degree if he is able to demonstrate that he is specially qualified, as by reason of practice or teaching. Normally the applicant will be required to show a level of scholarship appreciably higher than that required for the first degree in law at the institution from which he received that degree. An exceptionally high record in law school and in the graduate study program is expected of those who aspire to a teaching career. It should be emphasized that the graduate study program is designed for graduates with a definite objective, not for those who seek to pursue further law study simply from disorientation.



## REQUIREMENTS FOR THE DEGREE OF MASTER OF LAWS

The degree of Master of Laws is reserved for students who, having demonstrated their capacity for graduate work in law, maintain a level of scholarship substantially higher than that required for the degree of Bachelor of Laws in a course of study which involves distinctively graduate work.

The candidate for this degree is required to complete a course of study comprising not less than twenty nor more than twenty-six semester hours, or approved research equivalent thereto. Two full semesters are required for the completion of this program. A candidate for this degree is required to include in his course of study at least two of the following courses: International Law, Jurisprudence, and Legal History. In addition to the minimum requirement of twenty semester hours, the candidate is required to submit an essay representing substantial research on a legal subject. This essay is to be prepared under the supervision of the instructor in charge of the field in which the research is done. The candidate will find it helpful to have formulated a project of research, or alternative projects, before his admission to graduate study.

The candidate's course of study will be selected, ordinarily, from the following list of courses: Public Regulation of Business Seminar, Jurisprudence, Conflict of Laws, International Law, Legal History, Banking, Corporate Planning, Debtors' Estates, Insurance, Corporate Reorganization, Credit and Insolvency, Family Law, Family Law Seminar, Future Interests, Tax and Estate Planning, Labor Relations, Labor Standards, Labor Law Seminar, Federal Taxation I, Federal Taxation II, and State Taxation. This program of study is not inflexible. In appropriate cases the candidate will be encouraged to take related work in other departments of the University. Other courses of comparable content may be substituted for those listed. In special circumstances, credit not in excess of two hours per semester may be arranged for special, supervised research projects.

### *Doctor of Juridical Science*

#### ADMISSION TO CANDIDACY FOR THE DEGREE OF DOCTOR OF JURIDICAL SCIENCE

Any person holding the degree of Master of Laws from this or any other law school which is qualified for membership in the Association of American Law Schools may, on vote of the Faculty, be admitted to candidacy for the degree of Doctor of Juridical Science, provided he completed the work for the Master's degree with distinction.

REQUIREMENTS FOR THE DEGREE OF DOCTOR  
OF JURIDICAL SCIENCE

Upon favorable recommendation of the Faculty, the degree of Doctor of Juridical Science will be conferred on students admitted to candidacy for that degree who complete and submit a monograph or series of essays suitable for publication and deemed by the Faculty to be of distinguished character. At least one academic year, and, in the absence of an extension granted by the Faculty, not more than three years, must elapse between the award of the Master's degree and the award of the degree of Doctor of Juridical Science. Students who have received the degree of Master of Laws from another law school must spend at least two full semesters engaged in research at this School, and in addition may be required to complete a course of study prescribed by the Committee on Graduate Study. The monograph or series of essays required may be based upon, or be an extension of, the essay required for the Master's degree, provided substantial additional research is represented.

*Post-Graduate and Refresher Courses*

The School of Law provides instruction for students not meeting the requirements for admission to candidacy for graduate degrees who desire refresher courses or who desire simply to complete a fourth year of law school work. The successful completion of the courses taken by such students may be evidenced by certificate of the Dean.

# Program of Instruction



THE program of instruction of the School of Law has been thoroughly revised as a result of studies made by the Faculty. The newly adopted curriculum is designed to insure that students may prepare to specialize in practice without foregoing any part of the basic legal education required for general practice and desirable for all specialists. Courses have been combined; duplications in courses have been eliminated. The larger part of students' third year has been opened for studies of specialties. New courses and seminars have been added, especially in the third year in which teaching methods will be different from those used in the older courses. In these courses and seminars legal writing and drafting and legal planning will be emphasized.

The courses offered are listed below. They are grouped under three headings: First-Year Program; Recommended Second-Year Program, and Third-Year Courses.

THE FIRST-YEAR PROGRAM is prescribed. It includes basic courses in the fields of contracts, business associations, property (including sales and other chattel transactions), and torts. These courses serve also to acquaint the student with the nature of the judicial process (which is stressed in Chattel Transactions), the court system and court procedure (stressed in Torts), and legal history (stressed in the second property course and in other courses). In the field of public law, legislation and the legislative process are studied in the first semester; there follows in the second semester a course in the fundamentals of criminal law and its administration. A course in research and writing (which is continued throughout the second year), after consideration of how the law is found in law books, trains students in writing memoranda of law and legal arguments and in drafting legal documents; the course emphasizes, for each student, the law of the state in which he intends to practice, and introduces students to the art of legal planning. It includes the preparation of briefs and the arguing of moot court cases.

THE RECOMMENDED SECOND-YEAR PROGRAM comprises nearly all the other basic courses which all students need regardless of what kind of law practice they plan to enter and the courses prerequisite to third-year work in special fields and in legal planning. Third-year courses may be substituted for courses in this program with the consent of the instructors thereof and of the Dean. The research and writing course continues throughout the year. The basic work in property and business associations is completed. In the field of

business transactions, the students study negotiable instruments and credit. A course in federal taxation, basic to advanced third-year work for specialists, adequately covers the subject for students not planning to specialize in it. Legal and equitable remedies, and court procedure in civil cases, are studied in the course in remedies. Students continue their study of public law in courses in constitutional and administrative law.

THE THIRD-YEAR COURSES (of which an aggregate of 10 to 15 hours each semester is to be selected by each student) are designed to emphasize legal planning and drafting and to enable students to equip themselves to specialize in particular fields. The faculty recommends that all students complete their basic legal education by taking courses in evidence and legal ethics. There are also fundamental courses in legal history and jurisprudence and in conflict of laws and international law. The rest of the third-year courses are in specialties; they are grouped below under the headings (1) business (including *inter alia* advanced corporation law), (2) estates, family, and property, (3) procedure, practice, and local law, and (4) public law (including *inter alia* labor law and taxation). A number of these specialty courses (those preceded by asterisks in the list below) emphasize legal planning and drafting. Each student is required to include two of these courses in his third-year program; enrollment in each is limited.

### *The First-Year Program*

	SEMESTER HOURS	
	Fall	Spring
Chattel Transactions .....	2	2
Contracts .....	3	4
Research and Writing I .....	1	1
Torts .....	3	3
Criminal Law .....	3	
Legislation .....	3	
Business Associations I [Agency, Partnership, Introduction to Corporations] .....		2
Estates in Land .....		3
	<hr/> 15	<hr/> 15

### *The Recommended Second-Year Program*

	SEMESTER HOURS	
	Fall	Spring
Research and Writing II [Required] .....	1	1
Administrative Law .....	3	
Business Associations II [Including Accounting] .....	3	
Conveyancing .....	3	
Negotiable Instruments .....	3	
Civil Procedure I .....		3
Constitutional Law [Including Federal Jurisdiction] .....		4
Credit Transactions .....		3
Federal Taxation I .....		3
	<hr/> 13	<hr/> 14

## *The Third-Year Courses*

Students are to select courses aggregating 10 to 15 hours each semester. Every student must select two of the starred courses listed under "B. Specialties." These courses emphasize legal planning and drafting. Enrollment in each of them except Legal Aid Clinic is limited to 15. Legal Aid Clinic counts as a single starred course, though it is a year course. No student may take more than two starred courses in the same semester without the consent of the Dean and of the instructors in the starred courses involved.

### A. ADVANCED COURSES.

Conflict of Laws .....	3	
International Law .....		3
Jurisprudence .....		3
Legal History .....		2

### B. SPECIALTIES.

#### I. Business. (See also "IV. Public Law.")

*Corporate Planning .....	2	
Debtors' Estates .....	2	
Insurance (Not Offered 1951-1952) .....	2	
*Contract Planning and Drafting .....		1
*Corporate Reorganization .....		2

#### II. Estates, Family, Property

Family Law .....	2	
Future Interests .....	3	
Trusts .....	3	
Family Law Seminar .....		2
*Tax and Estate Planning (Also listed under "IV. Public Law.") .....		2
Wills and Administration of Estates .....		3

#### III. Procedure, Practice and Local Law.

*Legal Aid Clinic .....	2	2
*Case Studies .....	1	
North Carolina Statutes and Decisions .....	2	
Civil Procedure II .....		3
Evidence .....		4
Legal Ethics .....		1
North Carolina Practice .....		2

### IV. Public Law.

Advanced Criminal Law (Not Offered 1951-1952) .....	2	
Federal Taxation II .....	3	
Labor Relations [National Labor Relations Act; collective bargaining, strikes, etc.] .....	3	
Municipal Corporations (Not Offered 1951-1952) .....	2	
State Taxation (Not Offered 1951-1952) .....	2	
*Constitutional Law and Federal Courts Seminar (Not Offered 1951-1952) .....		2
*Labor Law Seminar [Negotiations; contract clauses; grievances; arbitration, etc.] .....		2
Labor Standards [Workmen's Compensation, Fair Labor Standards Act, etc.] .....		2
*Public Regulation of Business Seminar .....		3
*Tax and Estate Planning (Also listed under "II. Estate, Family, Property.") .....		2



# Description of Courses



## *Business Courses*

- BUSINESS ASSOCIATION I.—Two hours a week second semester. MR. LATTY
- BUSINESS ASSOCIATIONS II.—Three hours a week first semester. MR. LATTY
- CONTRACTS.—Three hours a week first semester, four hours a week second semester. MR. STANSBURY
- CONTRACT PLANNING AND DRAFTING.—One hour a week second semester. MR. STANSBURY
- CORPORATE PLANNING.—Two hours a week first semester. MR. LATTY
- CORPORATE REORGANIZATION.—Two hours a week second semester. MESSRS. LATTY AND EVERETT
- CREDIT TRANSACTIONS.—Three hours a week second semester. MR. EVERETT
- DEBTORS' ESTATES.—Two hours a week first semester. MR. EVERETT
- INSURANCE.—Two hours a week first semester. (Not offered 1951-1952.) MR. McDERMOTT
- NEGOTIABLE INSTRUMENTS.—Three hours a week first semester. MR. EVERETT
- PUBLIC REGULATION OF BUSINESS SEMINAR.—Three hours a week second semester. MR. LIVENGOOD AND MEMBERS OF THE ECONOMICS DEPARTMENT STAFF

## *Property Courses*

- CHATTEL TRANSACTIONS.—Two hours a week throughout the year. MR. LATTY
- CONVEYANCING.—Three hours a week first semester. MR. BOLICH
- ESTATES IN LAND.—Three hours a week second semester. MR. BOLICH
- FUTURE INTERESTS.—Three hours a week first semester. MR. BOLICH
- TAX AND ESTATE PLANNING.—Two hours a week second semester. MESSRS. BOLICH AND LOWNDES
- TRUSTS.—Three hours a week first semester. MR. LIVENGOOD
- WILLS AND ADMINISTRATION OF ESTATES.—Three hours a week second semester. MR. McDERMOTT

## *Public Law Courses*

- ADMINISTRATIVE LAW.—Three hours a week first semester. MR. KRAMER
- CONSTITUTIONAL LAW.—Four hours a week second semester. MR. MAGGS
- CONSTITUTIONAL LAW AND FEDERAL COURTS SEMINAR.—Two hours a week second semester. (Not offered 1951-1952.) MR. MAGGS

- CRIMINAL LAW.—Three hours a week first semester. MR. McCLAIN
- CRIMINAL LAW AND PROCEDURE (ADVANCED).—Two hours a week first semester. (Not offered 1951-1952.)
- FEDERAL TAXATION I.—Three hours a week second semester. MR. LOWNDES
- FEDERAL TAXATION II.—Three hours a week first semester. MR. LOWNDES
- INTERNATIONAL LAW.—Three hours a week second semester. MR. WILSON
- LABOR LAW SEMINAR.—Prerequisite: Labor Relations. Two hours a week second semester. MR. LIVENGOD
- LABOR RELATIONS.—Three hours a week first semester. MR. LIVENGOD
- LABOR STANDARDS.—Two hours a week second semester. MR. LIVENGOD
- LEGISLATION.—Three hours a week first semester. MR. KRAMER
- MUNICIPAL CORPORATIONS.—Two hours a week first semester. (Not offered 1951-1952.) MR. McDERMOTT
- PUBLIC REGULATION OF BUSINESS SEMINAR.—Three hours a week second semester. MR. LIVENGOD AND MEMBERS OF THE ECONOMICS DEPARTMENT STAFF
- STATE TAXATION.—Two hours a week first semester. (Not offered in 1951-1952.) MR. LOWNDES
- TAX AND ESTATE PLANNING.—Two hours a week second semester. MESSRS. BOLICH AND LOWNDES

### *General Courses*

- CONFLICT OF LAWS.—Three hours a week first semester. MR. STANSBURY
- FAMILY LAW.—Two hours a week first semester. MR. BRADWAY
- SEMINAR IN FAMILY LAW.—Family Law is prerequisite. Two hours a week second semester. MR. BRADWAY
- JURISPRUDENCE.—Three hours a week second semester. MR. KRAMER
- LEGAL HISTORY.—Two hours a week second semester. MR. BOLICH
- NORTH CAROLINA STATUTES AND DECISIONS.—Two hours a week first semester. MR. BRYSON
- TORTS.—Three hours a week throughout the year. MR. LOWNDES

### *Procedure and Practice Courses*

- CASE STUDIES.—One hour a week first semester. INSTRUCTOR TO BE ANNOUNCED
- CIVIL PROCEDURE I.—Three hours a week second semester. MR. McCLAIN
- CIVIL PROCEDURE II.—Three hours a week second semester. MR. MAGGS
- EVIDENCE.—Four hours a week second semester. MR. McDERMOTT
- LEGAL AID CLINIC.—Two hours a week throughout the year. MR. BRADWAY
- LEGAL ETHICS.—One hour a week second semester. MR. BRADWAY
- NORTH CAROLINA PRACTICE.—Two hours a week second semester. MR. BRYSON

*Legal Research and Writing*

RESEARCH AND WRITING I.—One hour a week throughout the year.

MESSRS. STANSBURY, BRYSON, AND BRADWAY,  
AND THE LEGAL AID CLINIC STAFF

RESEARCH AND WRITING II.—One hour a week throughout the year.

MESSRS. STANSBURY, BRYSON, AND BRADWAY,  
AND THE LEGAL AID CLINIC STAFF

Upon recommendation of the Committee on Graduate Study, seminars not listed in the Bulletin may be created or arrangements made for supervision of special research by individual graduate students in any subject.

---

All matters presented in this Bulletin are subject to change as the University or the School of Law may deem expedient.

## THE SCHOOL OF MEDICINE

Winter Quarter, 1951, begins January 3;

Spring Quarter, 1951, begins March 27;

Summer Quarter, 1951, begins July 2;

Autumn Quarter, 1951, begins October 1;

Winter Quarter, 1952, begins January 3;

Spring Quarter, 1952, begins March 24;

Summer Quarter, 1952, begins June 30;

Autumn Quarter, 1952, begins September 29.

# General Statement



DUKE UNIVERSITY School of Medicine and Duke Hospital were established in 1930, through the munificent gift of the late James B. Duke. The School of Medicine has been planned to insure the greatest correlation between the various departments. These facilities are available also for students who are studying for degrees other than that of Doctor of Medicine. The School of Medicine has been approved as Class A by the American Medical Association and is also a member of the Association of the American Medical Colleges. On October 2, 1950, two hundred and ninety-six students were enrolled.

## *Aims of the School*

Duke University School of Medicine, from its beginning in 1930, has maintained as its major objectives: (a) the cultivation and teaching of medicine on a strictly scientific basis; (b) the correlation of medical research with medical teaching at all levels of its teaching, and (c) the continuous search for and experimentation with new or improved methods of teaching scientific medicine. In order to attain these objectives, the School has been organized, its physical plant planned, and its administrative structure constituted so that there exists the closest possible academic and physical relationship between undergraduate and graduate work in the University and the School of Medicine, and also between the basic medical sciences and the clinical sciences within the School and its integrated teaching Hospital. The professional staff of the School is composed of two general categories, those with permanent appointment and unlimited tenure, and those with temporary appointment. The latter, the much larger group, is maintained on a highly fluid basis, which makes possible a high degree of selectivity in appointment for academic training and scientific research. The smaller group of permanent appointees has in every individual a background characterized by academic and scientific attainment. The professional, academic, and scientific environment created by the staff is thus such as to engender scientific inquiry and to encourage diligent pursuit of the medical sciences in all their relationships. The staff at all levels devotes its entire professional time to the activities of the School or Hospital.



## *Facilities of the Hospital*

Duke Hospital, an integral part of Duke University School of Medicine, has every modern convenience for the diagnosis, proper care, welfare and comfort of the patients, both private and charity, white and colored, whether they come from Durham or from a distance. It has 579 beds, including 30 bassinets for newborn infants, and 20 premature nursery bassinets. *Medicine*, including dermatology and neurology, has 77 ward beds; *surgery*, including urology, otolaryngology, ophthalmology, and orthopaedics, 135 ward beds; *obstetrics*, including *gynecology*, 59, and 50 bassinets; *neuropsychiatry*, 9; and *pediatrics*, 40. There are 209 private rooms and semiprivate cubicles, 12 air-conditioned operating rooms, 4 obstetric delivery rooms, and ward and student laboratories. Offices and examining rooms for members of the Medical Faculty are located in the Hospital. The Hospital has been approved for internships and residences by the Council on Medical Education and Hospitals of the American Medical Association, and the American College of Surgeons.

Duke Hospital and its Out-Patient Clinic were opened for patients on July 21, 1930. Through December 31, 1950, 403,745 individuals have been examined, diagnosed, and treated. The average daily census of hospital patients during the past year was 465; 104,884 visits were made to the Out-Patient Clinic during the same period. Twenty-one per cent of the patients come from within a radius of twenty miles, the remaining 79 per cent come from the other 99 counties in North Carolina and from 36 other states and 3 foreign countries. The average distance traveled by the patients is more than seventy miles.

The Private Diagnostic Clinic was organized to co-ordinate the diagnostic studies, and to give better care to the complicated problems arising in the examinations of private patients. The Clinical Staff of Duke Hospital and School of Medicine forms the professional staff of this clinic, while the financial side is handled by a business manager. The offices and examining rooms are in Duke Hospital, and all of the laboratory and diagnostic facilities of the Hospital and School of Medicine are utilized by the Clinic.

## *Library*

*"To study the phenomena of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all."*—SIR WILLIAM OSLER.

In addition to the General Library of Duke University and the departmental libraries of biology, chemistry, physics, etc., which have 965,000 volumes available for medical students, Duke Hospital Library contains 50,500 volumes of American and foreign medical literature and subscribes to 575 current American and foreign medical and other

scientific journals. These books and journals are available daily from 8:30 A.M. to 10:30 P.M. for the students, nurses, staff, and medical profession.

### *Medical Care*

With exceptions noted below, full medical and surgical care is furnished to all regularly matriculated medical students of the University who have paid the quarterly General Fee. This service is under the direction of the Physician in Charge with the co-operation of the Staff of Duke Hospital. It includes hospitalization (limited to thirty days), medical and surgical care, drugs, dressings, x-ray studies, and ward but not special nursing. A charge for board is made at the same rate as in the University dining halls. Refraction of eyes and treatment of teeth and of all chronic and pre-existing conditions, such as diseased tonsils, hernia, elective surgery, chronic skin conditions, endocrine disturbances, etc., or accidents or illnesses occurring during vacations or while off the campus are not included in this service. The cost of any necessary braces and orthopaedic appliances, as well as of special nursing, must be borne by the patient.

### *Student Government*

The members of the student body elect an Honor Council, in which each class is represented. It is the duty of the Honor Council to hear all cases involving breaches of conduct on the part of members of the student body. All new students entering the School are required to comply with this system of government.

### *Medical Military Science and Tactics*

The course consists of instruction in military medicine and military science and tactics. The student receives compensation during the last two years and while at a required summer encampment. Those completing the program will be offered reserve commissions in the Army Medical Corps or the Air Force Medical Corps and will be given priority in the selection of interns for military hospitals. Details of the program, eligibility, compensation, etc., may be obtained by addressing the PMS&T, Duke University School of Medicine.

# Curriculum of the School of Medicine



THE curriculum, shown below, consists of two semesters in the first year and three quarters each in the second, junior and senior years. There is no summer quarter between the first and second year, but in the two clinical years the subjects of the autumn, winter and spring terms are repeated in the summer quarter. This accelerated schedule is optional,\* and students may take the two semesters of their first year, and three quarters in each of their subsequent years, and receive their certificates in four calendar years, *or*, if they receive permission from the Curriculum Committee, they may at the end of their second year take the clinical quarters given during the summers and receive their certificates in three and one quarter calendar years.

Every effort is made to emphasize the close relationship of pre-clinical and clinical instruction. Members of the clinical staff assist in the teaching of preclinical subjects and demonstrate to the students of the first two years patients whose conditions illustrate the subjects being taught. Thus, from the student's first days, he is impressed with the interdependence of all branches of the medical science. In the junior and senior years, preclinical instructors assist the clinical staff in presenting the underlying basis of disease.

The free time in this curriculum may be spent in elective work or anything else the student wishes to do. No credits are given, but opportunity is provided for each student on his own initiative to obtain additional training which he may feel to be necessary or desirable. Elective courses have been organized for small groups, or the time may be utilized in independent work (including research) in any department, clinical or preclinical. Arrangements for taking such courses or doing other work are to be made through the Curriculum Committee.

It is hoped that many students will migrate to other medical schools for one or more quarters. Those who wish to do so, or to substitute a schedule different from that listed below, must have their programs approved in advance by the Curriculum Committee, and afterwards must present evidence that they have completed work comparable to that of the curriculum during the quarters in which they were away or were following an altered schedule.

\* See footnote on the next page.

## OPTIONAL ACCELERATED SCHEDULE\*

(The hours for these courses will be posted on the bulletin board.)

## FIRST YEAR

## FIRST SEMESTER:

HOURS

October 2, 1950, to February 7, 1951.

Anatomy (including histology and neuroanatomy) ..... 638

## SECOND SEMESTER:

February 14 to June 9, 1951.

Physiology ..... 341

Biochemistry ..... 279

Psychobiology ..... 12

Free time ..... 17

## SECOND YEAR

## AUTUMN QUARTER (4th):

October 2 to December 16, 1950.

Pharmacology ..... 143

Bacteriology ..... 176

Parasitology ..... 44

Public Health and Biostatistics ..... 66

## WINTER QUARTER (5th):

January 2 to March 17, 1951.

Pathology ..... 231

Public Health ..... 66

Introduction to Medicine and Surgery ..... 132

## SPRING QUARTER (6th):

March 27 to June 9, 1951.

Pathology ..... 223

Introduction to Medicine ..... 111

Clinical Microscopy ..... 95

## JUNIOR YEAR

## SUMMER QUARTER (7th):\*

July 2 to September 15, 1951.

Medicine (Junior) ..... 429

## AUTUMN QUARTER (8th):\*

October 1 to December 15, 1951.

Surgery (Junior) ..... 429

## WINTER QUARTER (9th):\*

January 3 to March 15, 1952.

Obstetrics and Gynecology (Junior) ..... 352

Neuropsychiatry ..... 77

## SENIOR YEAR

## SPRING QUARTER (10th):\*

March 24 to June 7, 1952.

Medicine (Senior) ..... 390

Free Time ..... 39

## SUMMER QUARTER (11th):\*

June 30 to September 13, 1952.

Surgery (Senior) including urology and orthopaedics ..... 390

Electives ..... 39

## AUTUMN QUARTER (12th):\*

September 29 to December 13, 1952.

Pediatrics ..... 297

\* This optional schedule may be made compulsory, and a thirteenth elective quarter may be added to the senior year.

\* The clinical instruction is repeated each quarter in order to utilize all the clinical material and to have small groups of students. Consequently, students may vary the order of the seventh, eighth, and ninth quarters, and also the order of the tenth, eleventh, and twelfth quarters. The above schedule merely illustrates the program of one group.

Surgery .....	41
Neuropsychiatry .....	41
Preventive Medicine .....	11
Electives .....	39

## SUMMARY

Total number of hours in curriculum .....	5,148
---	-------

### *Requirements for the Degree of Bachelor of Science in Medicine*

After the completion of six quarters in the Duke University School of Medicine, Duke University, on the recommendation of the Executive Committee, grants the degree of Bachelor of Science in Medicine to medical students who have completed creditable investigative work, prepared an acceptable report of the investigation, and passed an examination upon the subject of the investigation before an advisory committee. Students who elect to undertake work toward this degree must obtain written permission from the Executive Committee after approval of their program by the head of the department in which the work is to be done. No credit toward this degree is given for additional college work. All students in good standing are encouraged to undertake such investigative work as they may elect with the approval of the head of the department in which they wish to work. All requirements must be completed three months prior to the date on which the B.S. degree is requested.

### *Requirements for the Degree of Doctor of Medicine*

The degree of Doctor of Medicine is conferred on those who have completed, to the satisfaction of the Executive Committee, the twelve quarters of 11-12 weeks each of the curriculum of the School of Medicine, the preclinical and clinical examinations, and have signed an agreement that they will spend at least two years of the succeeding three years in hospital or laboratory work acceptable to the Executive Committee. As a guarantee of this pledge the diploma is deposited in the Treasurer's Office until after the completion of this training. Failure to fulfill this agreement constitutes a waiver of any claim to possession of the diploma and the degree of Doctor of Medicine.



# Admission



## *Application for Admission*

APPLICATION forms may be obtained by writing to the Committee on Admission, Duke University School of Medicine, Durham, N. C. A check or post office money order for \$5, payable to Duke University School of Medicine, must accompany each request for an application. This is not refundable. If further information is required after the Committee has studied the completed application, a personal interview with the Committee on Admission or a Regional Representative is arranged for the applicant. The candidate then is notified as soon as possible whether he has been accepted or declined; if accepted, he must send a deposit of \$50 within two weeks to insure enrollment. This money is applied toward the tuition. The next first-year class will be admitted October 1, 1951. Applications should be submitted by December 1st, of the preceding year. Due to the large number of applicants to all medical schools, candidates are advised to apply to at least four schools. The number of students in each class is limited to 76, but only those students will be accepted who give promise of being a credit to the School and the medical profession. Women are received on the same terms as men. In the event of vacancies, students from other medical schools may be considered for admission to any quarter for which their previous training has fitted them. Each application for advanced standing will be considered upon its own merits.

## *Requirements for Admission*

*"I request that great care and discrimination be exercised in admitting as students only those whose previous record shows a character, determination and application evincing a wholesome and real ambition for life."*—JAMES B. DUKE.

*Intelligence and character are the essential qualifications for admission.*

The minimum requirements for admission to this School include approved college credits of not less than ninety semester hours, which shall include adequate preparation in English, mathematics, physics, biology, and chemistry. This preparation should be obtained in college courses of one-year duration, except in English and chemistry. In those subjects, two years are recommended. The second year in

English should be chiefly composition and theme writing. The first year of chemistry should be general (inorganic), and the second, analytic and organic chemistry.

The premedical students should be aware of the importance of a well-rounded general education as a preparation for the study of medicine and not limit himself to scientific courses. He would be better advised to secure a knowledge of the principles and a thorough appreciation of the interrelations of the basic sciences than to accumulate credits in many courses. He should learn how to work independently, to observe critically, and to analyze, rather than simply store, the information presented. His choice of studies, beyond those required for admission, should be governed by his own chief interests and by the intellectual stimulus to be derived from the work. His major interest may be in any field, scientific or otherwise, and should provide an opportunity for the demonstration of his real ability. In general, he should avoid courses in subjects which are included in the medical curriculum.

The selection of students is based upon the quality rather than the quantity of preparation and upon demonstrated evidence of personal attributes of intelligence, character, and general fitness for the study and practice of medicine. In considering an applicant many sources of information may be consulted including (1) his curricular and extracurricular college record, (2) carefully prepared, confidential appraisals by teachers who know him personally, (3) his percentile rating on the Medical College Admission Test,\* and (4) the results of an interview with members of the Admission Committee or one of its Regional Representatives.

\* This test is given at many of the colleges during the spring and autumn terms. If information is not available locally, it may be obtained from the Educational Testing Service, P.O. Box 592, Princeton, N. J.

# Fees and Expenses



ALL FEES for each quarter are due and payable at the beginning of each quarter, and no student will be admitted to classes until these fees have been paid at the University Treasurer's Office. A fine of \$5.00 is charged for late registration. No credit will be given for any quarter in which the tuition of \$250 has not been paid at the Treasurer's Office, whether the work has been done here or elsewhere, except that students who have been permitted by the Curriculum Committee to spend a quarter at another medical school or hospital may subtract the amount of tuition paid at this other medical school or hospital from the \$250 due here for that quarter.

It is not advisable for a student to attempt outside work to defray his expenses; the results usually are disastrous to his health and academic standing.

## FEES AND EXPENSES

Tuition, per quarter .....	\$250		
General Fee, per quarter, including Health, Commencement, and Diploma Fees .....	7.50		
Athletic Fee, admitting student to all athletic contests held on the University campus, during the quarter (optional) .....	5.00		
		plus Federal tax	
Room-rent, per quarter* (estimated) .....	58.50		
Board, per quarter (estimated) .....	120	to	130
Laundry, per quarter (estimated) .....	10	to	20
Books, per quarter (estimated) .....	25	to	50
National Board of Medical Examiners, Fees† \$20 (Part I), \$15 (Part II)			
Microscope, ophthalmoscope, otoscope, and other equipment, which are required of each student and which must conform to rigid standards, may be obtained on a rental basis from the Univer- sity, per quarter .....	40	to	60
Estimated total expenses, per month .....	150	to	250

\* Rooms may be reserved by medical students in Few Quadrangle. These rooms are provided with furniture, heat, electric light, and care of rooms; each student furnishes his own blankets, sheets, pillow-slips, towels, and pillows. Applications for rooms, accompanied by a reservation fee of \$25, should be made by writing to Mr. W. E. Whitford, Duke University, Durham, N. C.

† Payable at the beginning of the quarter in which a student is eligible for the examination.

# Departments of Instruction



## *Anatomy*

The required courses of instruction in gross human anatomy, histology, and neurology are scheduled for five and one-half days a week for a period of eighteen weeks during the first semester of the first year. Emphasis is placed upon the study of material in the laboratory. In an attempt to utilize more fully the laboratory time, visual educational methods are employed as fully as possible. These techniques consist of colored motion pictures of demonstration dissections, colored lantern slides, and motion pictures, both embryological and neurological. All of the instruction is designed to be as informal and as nearly individual as possible. General principles and the functional viewpoint of living anatomy are stressed in the hope that the student may be stimulated to secure a working knowledge of anatomy in the broadest sense. Whenever possible, fresh tissues and living cells are made available for examination, and clinical cases exemplifying anatomical principles are studied whenever they are available at appropriate times. Through the co-operation of the Department of Radiology, the students are given an opportunity to study portions of the living human body as revealed by the fluoroscope and roentgenograph. The following elective courses are offered:

*Demonstrations in Anatomy.* Using dissections already prepared, weekly demonstrations of selected regions or systems are made by the members of the group. Sixth quarter—Two hours per week by arrangement. Second-year students in groups of 10.

*Review in Anatomy.* During the sixth quarter, a review in anatomy will be presented by the visual education methods outlined above, covering gross and neuro-anatomy, and histology.

*Special Neuro-anatomy.* Laboratory work and conferences upon selected portions of the human central nervous system. Limited to 6 junior or senior students. Two hours weekly by arrangement.

*Brain Modeling.* Free-hand reconstruction in clay, from gross and sectioned material, of the chief tracts and nuclei of the human brain stem. By arrangement—4 to 10 students.

*Experimental Neurology.* An operative and laboratory study of the effect of various lesions upon the central and peripheral portions of the nervous system. 4 to 8 junior and senior students by arrangement. Prerequisite—operative surgery.

*Advanced Studies in Anatomy.* These may be arranged at any time under the direction of the various members of the staff.

*Review for Orthopaedic Anatomy.* A one hour weekly review of the anatomy related to orthopaedic surgery.

*Review for Surgical Anatomy.* A one hour weekly review of the anatomy related to general surgery.

## *Biochemistry*

The required course in general biochemistry for first-year students is given over a period of eighteen weeks during the second semester. Two lectures, four laboratory periods, and one conference period per week are devoted first to the correlation of the fundamental facts and theories of physical and organic chemistry of proteins, fats, and carbohydrates with the chemistry of living organisms; followed by an intensive study of the chemical aspects of the processes of digestion, absorption, circulation and respiration, acid-base and salt equilibrium, intermediary and over-all metabolism. Each student carries out on himself a fairly complete metabolism balance study involving quantitative analyses of blood and urine.

Since the success of the students in this course is largely determined by the adequacy and ready availability of their premedical training, it is urged that all students review the fundamental laws, theories, and facts of chemistry before the beginning of the course. A circular outlining the topics requiring special attention is sent to all students upon admission. Additional copies of the circular may be obtained from the Dean's Office. An examination to test the state of preparation of the student is given in the beginning of the course in biochemistry.

*Biochemical Research.* The facilities of the department, including various types of research equipment and the clinical material of the blood chemistry laboratory, are available to properly qualified students for independent or supervised investigations. Chemical investigations of problems in biochemistry or in conjunction with the clinical and pathological departments may be carried on.

*Seminar in Toxicology.* A round-table discussion of the homicidal, suicidal and industrial poisons, alcoholism, etc., by arrangement.

*Laboratory Detection of Common Poisons.* A laboratory course in the properties, detection, and identification of the common poisons. Consideration is given to the types of material to be examined, legal precautions to be taken and interpretation of the findings, by arrangement.

*Chemistry of Proteins, Enzymes, and Viruses.* A two-hour seminar is given weekly throughout the Autumn, Winter, and Spring Quarters.

*Physical Biochemistry.* A two-hour lecture course with demonstra-



tions, given weekly in Autumn and Winter Quarters. Given alternately with *Chemistry of Proteins, Enzymes and Viruses*.

*Intermediary Metabolism.* A two-hour lecture course and seminar conducted during Autumn, Winter and Spring Quarters. Given alternately with *Seminar in Nutrition*.

*Advanced Seminar in Nutrition.* A two-hour lecture and seminar course in modern nutritional concepts. Given alternately with *Intermediary Metabolism*.

*Biochemistry of Disease.* A seminar course meeting once weekly to discuss etiology and pathogenesis of metabolic diseases from the biochemical viewpoint. Given in alternate years in the Spring Quarter.

## *Physiology and Pharmacology*

The course in medical physiology for first-year students is given over a period of eighteen weeks during the second semester. There are lectures, laboratories, and conferences each week in which are presented the general principles of human physiology and their general application to the practice of medicine. This course runs parallel to biochemistry.

The course in pharmacology is given in the first quarter of the second year. Lectures, laboratories, and conferences deal with the mode of action of drugs in terms of biochemical and physiological processes.

*Physiological and Pharmacological Research:* The facilities of the department include modern types of research equipment. There are special facilities for research in the field of respiration; circulation; and cellular metabolism. Properly qualified students are permitted to undertake original research in physiology and pharmacology under direction of various members of the staff.

*Seminars:* Seminars in special fields of physiology are offered to graduate students by various members of the staff.

## *Bacteriology, Immunology, and Mycology*

*Bacteriology, Immunology, and Mycology.* The required course is given in the fourth quarter. An intensive study is made of the common bacteria, fungi, and viruses which cause disease in man. The scope of the laboratory course is reasonably wide and acquaints the student with all the methods and procedures employed in bacteriological laboratories. Most of the lecture time is devoted to the immunological and epidemiological aspects of infection. The instruction is designed to give the students a clear conception of: (1) how organisms gain entrance to the body, (2) the type of poisons which they produce, (3) the nature of immune bodies which are produced by the host, and

(4) the methods of preventing the disease by active and passive immunization.

*Research Bacteriology.* Opportunities for original investigations are afforded a few specially qualified students.

*Clinical Bacteriology.* During their clinical clerkships on medicine (one quarter each for junior and senior classes), the students may perform the routine and special bacteriological work for the patients assigned to them on the teaching service, under the direction of the Department of Bacteriology and in parallel with the Biological Division of the medical clinic.

## *Pathology*

*General Pathology.* The course in general pathology is given during the fifth and sixth quarter of the curriculum, following completion of the prerequisite courses in anatomy, physiology, biochemistry and bacteriology. All the work of the class is done with small groups, each under the guidance of a senior instructor and his junior assistant. The histological aspects of the pathological processes are studied coincidentally with the gross anatomical and physiological alterations of the tissues, thus maintaining a unity of conception of disease. As the various pathological processes and the diseases arising from their elaboration are studied by the student groups, assignments involving reports on the study of groups of cases are made to individual students. The group work and the individual student reports are supplemented by weekly conferences involving the class as a whole and dealing with problems presented by current autopsies and with other problems of general importance. Student collaboration in post-mortem studies is required. Cases thus studied are presented by the student before the class under the direction of the staff; this takes the form of a clinical-pathological conference in which each student plays a particular role.

*Elective Courses.* Special courses in pathology are given to students who have completed the course in general pathology. These courses are available through special arrangement.

*Clinical-Pathological Conference.* A weekly clinical-pathological conference for advanced study is held on Saturdays. It is open to all persons interested, but is designed especially for the Hospital and Medical School Staff. Attendance by all the students is encouraged but is optional. Miscellaneous weekly pathological conferences dealing with current cases under treatment on the various services are held for instruction of the staffs concerned.

*Student Research.* Research facilities are provided for competent students. Those who show an interest in investigative work are given every encouragement and are allowed to work independently or in collaboration with the staff.

*Postgraduate Instruction.* The staff of the department is composed of senior nonresident and junior resident members. The junior resident staff consists of interns, assistant residents, and a resident; all of these are active teachers as well as advanced students of disease. Ample opportunity for the development of a career in the field of pathology is provided for these men.

*Medicolegal Instruction.* The department works in close cooperation with the local coroner's office. Special medicolegal investigations for others are undertaken from time to time. The department collaborates with other departments of the Schools of Medicine and Law in a course in legal medicine that is given in alternate years.

## *Medicine*

*Introduction to Clinical Medicine and Physical Diagnosis.* This course is initiated, in the fifth quarter, by introductory lectures, case discussions, and instruction in the methods of physical examination and history taking. Early in the course students begin work at the bedside in the examination of selected patients. Emphasis throughout is placed on instruction individually or in small groups. The interpretation and pathogenesis of all abnormal findings are stressed. The Departments of Neurology and Psychiatry provide training in neurological and mental examinations. This plan of teaching continues in the sixth quarter, when, in addition, instruction in the more specialized methods of examination is provided through the co-operation of the Departments of Surgery, Obstetrics, Gynecology, and Radiology.

*Clinical Microscopy* is given in the fifth quarter. The course includes the essentials of hematology and the examination of fresh material, such as urine, stools, spinal fluids, sputum, transudates, and exudates. The most important parasites of man are studied by the use of fresh and museum material. Second-year and senior students are given opportunities for special work and for investigation. This course is supplemented in the Junior and Senior years by Hematology Conferences, which are held weekly, and Ward Rounds, which are held three times weekly.

*Cutaneous Medicine and Syphilology.* Instruction consisting of lectures, seminars and study and treatment of patients in the out-patient clinics and on the wards is offered each quarter to Junior and Senior students. In addition, an elective course consisting of advanced teaching in clinical dermatology and syphilology is offered to a limited number of students.

*Junior and Senior Medicine.* The medical students are assigned to the medical wards as clinical clerks for one half of their time, and to the medical out-patient department where they examine patients for the other half of their time.

## *Neuropsychiatry*

Instruction starts in the first year with an introductory course in psychiatry. In the second year, methods of psychiatric examination and a general presentation of the main reaction types are given. Each third-year student has a two-week clerkship on the psychiatric ward, and in the fourth year patients are worked up in the out-patient clinic for a period of three and a half weeks. A neuropsychiatric amphitheater clinic is held weekly throughout the year for third- and fourth-year students. Elective courses in neuropsychiatric methods of research, neurophysiological aspects of neuropsychiatry, psychosomatic medicine, psychoanalysis in medicine, and principles of psychotherapy are offered to fourth-year students. Students are invited to attend the staff case conferences, the psychosomatic conferences and the conferences on neuropsychiatric disorders of childhood. Emphasis is placed upon the close relationship of psychiatry to other branches of medicine and the social sciences. Internships are available in neuropsychiatry with the expectation that they will lead to progressively greater interest in the neuropsychiatric problems encountered on all other services in the Hospital. Graduate training in psychiatry meeting the requirements of the American Board of Psychiatry and Neurology is given. Regular courses in conjunction with the Veterans Administration training program are available. Investigation is encouraged.

## *Surgery*

*General Surgery.* In the sixth quarter the students, during their course in physical diagnosis, attend clinics and demonstrations arranged to familiarize them with the techniques of examinations and diagnostic procedures used in general surgery and the surgical specialties. They also have the opportunity in this quarter to become familiar with certain basic principles in aseptic and atraumatic surgery and in isolation technique. The *junior* students, during their surgical quarter, attend ward rounds in surgery and the surgical specialties, act as clinical clerks on the wards and assist in the operative treatment of patients assigned to them. The surgical students in the *senior* year attend ward rounds in general surgery and the surgical specialties in the mornings and assist in the surgical out-patient clinics in the afternoon. Also in groups of two for the proportionate time available they are assigned to the emergency division of the out-patient clinic where they assist in the diagnosis and care of urgent conditions.

A six days' concentrated course of training in the administration of anesthetic agents is open to twenty-four medical students each school quarter. Properly qualified students observe and administer anesthesia under direct supervision of staff anesthetists.



*Otolaryngological Division.* An introductory course of instruction in the use of otolaryngological instrument, with a review of normal anatomy, is given to second-year students in the sixth quarter. Clinics during one quarter of alternating years are given to junior and senior students; students during their pediatric quarter work in the otolaryngological out-patient clinic as assigned. Ward rounds are held separately each week for third- and fourth-year students. Patients are assigned to junior students during the surgical quarter.

*Ophthalmological Division.* During the sixth quarter second-year students receive instruction in elementary ophthalmology. During the senior pediatric quarter the students work in the ophthalmological out-patient clinic as assigned, and assist in the study and treatment of eye diseases. Especial emphasis is placed on the underlying medical and surgical conditions. Each student follows throughout his time in the out-patient clinic all patients assigned to him. For those who manifest an unusual interest in this specialty, provision will be made for more advanced work. Throughout the senior surgical quarter the students attend ophthalmological ward rounds for one hour each week. During either their third or fourth academic year clinics covering the more general neuro-ophthalmological and medical problems are given.

*Orthopaedic Division.* In the sixth quarter an introductory course is given. During the surgical quarters the junior and senior students attend weekly ward rounds of one hour each in orthopaedics and fractures. Amphitheater clinics are held every third quarter. Students in their senior surgical quarter are assigned in rotation to the orthopaedic out-patient clinic. These students also attend orthopaedic staff rounds at 5:30 P.M. Mondays through Fridays. An elective course in the treatment of fractures, limited to three students, is offered during the junior and senior surgical quarters. An elective course in physical therapy is also offered during these quarters. Arrangements may be made for students who so desire to do research or experimental work. They may also attend the state orthopaedic clinics as held.

*Urologic Division.* In the sixth quarter, second-year students are given a course of lectures and practical demonstrations in urologic physical diagnosis in the normal individual student. Ward rounds on urologic patients are given every Saturday at 8:30 A.M. for third- and fourth-year students in their surgical quarter. Small groups are selected from the senior surgical group of students and assigned in rotation to the urologic out-patient clinic. During one quarter of the year, urologic clinics are given weekly for the junior and senior classes. These clinics deal with the affections of the male and female urinary tract and of the male genital tract. Clinics for urethroscopic and cystoscopic investigation and for the more technical methods of urologic diagnosis and treatment are held Monday, Wednesday, and Thursday from 1:30 to 5:00 P.M. and Tuesdays and Thursdays from



9:30 A.M. to 12:30 P.M. throughout the year. X-ray conferences on all urologic cases are held Tuesday, Thursday, and Saturday mornings from 8:30 to 9:30 and are followed by staff rounds. Three senior students may select one of these cystoscopic clinics, x-ray conferences, and staff rounds as an elective. *The Urologic Journal Club* meets each Monday from 4:30 to 6:30 P.M., and members of the staff review their respectively assigned journals. Interested students are welcome.

*Neurosurgical Division.* During all four quarters, separate weekly ward rounds are held for the junior and senior surgical groups. Emphasis in these rounds is placed upon the recognition of neurosurgical problems, followed by observation of the operative and post-operative procedures. Weekly x-ray and pathological conferences are held, and these may be attended by interested individuals.

*Division of Plastic Surgery.* Weekly ward rounds are given to familiarize both third- and fourth-year students with the principles and practice of plastic and oral surgery. Ward patients are assigned to the third-year surgical students and the fourth-year surgical students work up patients in the out-patient clinic. Each Tuesday and Thursday afternoon, an opportunity is afforded interested students to observe moulage and cast work, cosmetic restoration of color, the making of prosthetic appliances, etc. This work is done under the direction of Mr. Elon H. Clark, of the Department of Medical Illustration.

*Division of Thoracic Surgery.* During the academic year ward rounds, lectures and demonstrations are held to acquaint the third- and fourth-year students with the principles and practice of surgery of the chest. The anatomy and physiology of the respiration and circulation are reviewed and their application to thoracic surgery is stressed. X-ray diagnosis is emphasized and frequent pathology conferences are held to give the students a well-rounded knowledge of the surgical diseases of the chest.

*Division of Anesthesiology.* Junior students, during their surgical quarter, are given a series of eleven lectures by the medical anesthesiologists. Following a brief history of anesthetic drugs, the response of the body to such drugs is discussed. The physiological basis of the reactions encountered in the operating room is stressed and the rational for choice of agents for various patients is presented. A six days' concentrated course of training in the administration of anesthetic agents is open to twenty-four senior medical students each school quarter. These students observe and administer anesthetics under the supervision of staff anesthetists.

*Dentistry.* Second-year students, in the sixth quarter, are instructed in the principles of dentistry.

## *Radiology*

The student teaching schedule in roentgenology consists of a course in roentgen diagnosis and a course in therapeutic radiology. The first is offered during each scholastic quarter on Tuesday and Thursday of each week. The fundamental physics of x-ray is discussed, with the chief emphasis being placed upon the anatomical, pathological and physiological bases for the interpretation of x-ray films. The course is conducted in seminar fashion and no formal lectures are given. The students participate in and lead discussions with the instructor serving as the moderator. An attempt is made to acquaint the student with the aids of roentgenology in diagnostic problems. The correct use of x-rays in diagnosis is stressed.

Therapeutic radiology is given one hour weekly during each quarter. At these sessions the general problem of the treatment of benign, inflammatory and malignant lesions by x-ray and radium is discussed and the accepted views of the combination of these therapeutic agents with surgery is stressed. Representative cases are demonstrated, and the follow-up results are particularly stressed.

A limited number of senior students are permitted to attend routine film reading sessions in the Department of Radiology. They are also instructed in the fundamentals of fluoroscopic examinations and shown the many pitfalls of the inexperienced fluoroscopist.

A number of conferences with the resident house staff are conducted throughout the year. Each Monday from 8:30 to 9:30 A.M. a session with the ear, nose and throat staff is held, during which the roentgen and operative findings are correlated. Each Wednesday from 11:30 to 12:30 A.M. a pediatric conference is held at which current cases are discussed and clinical and x-ray findings are given. On alternate Wednesdays from 5:00 to 6:00 P.M. conferences are held with the surgical and medical house staffs and all cases with significant x-rays are presented for general discussion. The neurosurgical staff meets with members of the x-ray department every Saturday from 10:00 to 11:00 A.M. for a discussion of all cases that have been studied by the department.

Each Thursday afternoon and Wednesday evening a conference is held by the members of the x-ray staff and visiting radiologists. Difficult cases are brought up for discussion and diagnosis.

## *Obstetrics and Gynecology*

*Second-year* students receive seventeen hours of instruction in the fundamentals of obstetrics and gynecology during their course in physical diagnosis in the sixth quarter. Clinics and demonstrations for

junior and senior students are held on Saturdays at 10:30 A.M. during the Autumn, Winter, and Spring Quarters and on Mondays at 11:30 A.M. in the Summer Quarter. During one quarter of the *junior* year each group of students attends ward rounds at 8:30 A.M. on Mondays, Wednesdays, and Saturdays; preoperative conferences at 8:30 A.M. on Tuesdays and Fridays; and the out-patient clinic at 1:30 P.M. five times weekly, for nine weeks. They also attend an endocrine clinic once a week for nine weeks during the junior year. The students also spend part of each day on the wards. *Senior* students, during their surgical quarter, have ward rounds on obstetrics and gynecology on Saturdays at 8:30 A.M.

*Elective* courses in the diagnosis and treatment of obstetric and gynecological conditions are offered for junior and senior students.

### *Pediatrics*

*Junior* and *senior* students, during their medical quarters, have pediatric ward rounds on Saturdays, from 8:30 to 9:30 A.M. These *junior* students receive instruction in introductory pediatrics and the physical diagnosis of infants and children. The *senior* students are divided into three groups, each of which spends one quarter in pediatrics. During this quarter they are assigned daily as clinical clerks on the children's ward, nursery, and pediatric out-patient clinic, attend ward rounds at 8:30 A.M. Mondays and Fridays and 9:30 A.M. on Wednesdays; attend the staff conference at 8:30 A.M. on Wednesdays; attend child guidance clinic each Monday at 11:00 A.M.; attend conference on pediatric roentgenology each Tuesday at 11:30 A.M.; are instructed in the practical nursing of infants by Miss Sherwood on Fridays at 9:30 A.M.; and are taught the preparation of diets for infants and children by the Professor of Dietetics. Each student attends infant feeding clinics on Fridays during this quarter. Students may attend, on voluntary basis, the special pediatric clinics—nephritis, cardiac, allergy, and convulsive disorders. *Elective courses:* Senior students may spend two weeks in general practice with Instructors in General Practice. In addition to the six pediatric internships, there are four in which six months each are spent in obstetrics and pediatrics for graduates who plan to enter general practice. Seven assistant residencies and one residency are available.

### *Preventive Medicine and Public Health*

*Preventive Medicine and Public Health.* In the freshman year there are four lectures given to provide some basic orientation predicated upon the fact that disease has a community as well as a personal aspect and that the social component of illness is an important force

in the work of the doctor as well as in the life of the community. The student is introduced to disease as a mass or community problem and to medicine as a social institution.

In the sophomore year there is a series of lectures and discussions, totaling fifty-two hours, which outline in some detail the interrelationships between medicine and society. This course attempts to provide an understanding of the general principles governing the circumstances under which disease occurs and also the general principles used in the development of measures aimed at the control of disease, both communicable and non-communicable. The effect of the physical environment on human health is briefly discussed with special emphasis on the relationship of the practicing physician to environmental control programs and policies. An overview is given of the basic health problems at the various stages of life.

In alternate years, the senior and junior students meet together for eleven one-hour sessions. These sessions are devoted to discussions of the application of the principles of preventive medicine as they can be applied by the physician in private practice. Attention is also directed to the role of community health and welfare agencies as adjuncts to the physician in the management of his individual patient. The case method of presentation and study is used, with groups of students acting as the panel of experts.

*Medical Parasitology.* This is a lecture and laboratory course given one morning a week in the fourth quarter. Most of the emphasis is placed on the symptomatology, diagnosis and therapy of the various helminthic and protozoal diseases in man; several periods are devoted to medical entomology.

### *Legal Medicine and Toxicology*

This course embraces a discussion of the relation of physicians to legal criminal procedures, jurisdiction of the coroner and medical examiner, laws governing the dead human body, personal identity of the living and the dead, the medicolegal autopsy, traumatic injuries and fractures, rape, abortion, asphyxial death, homicidal, suicidal, and industrial poisoning, alcoholism, the examination of blood, stains, fibers, and the detection of malingering. The course is open to junior and senior students and is given in alternate years. Discussions of medicolegal problems for the house staff and senior students, and joint conferences of the medical and law students also are held.

### *Undergraduate Cancer Training Program*

(Supported by a grant in aid from the U. S. Public Health Service.)

During the senior year, the students in surgery participate in the teaching sessions held by the Undergraduate Cancer Training Pro-

gram staff and the senior staff. These sessions are held five days a week, and an attempt is made to cover systematically the various regions in the body in respect to the tumors which arise in them. The viewpoints of the clinician, the radiologist, and the pathologist are presented and correlated at this time. The students themselves prepare seminars on theoretical subjects which have a direct bearing on the problem of neoplasia in general. This portion of the program is repeated each quarter throughout the year.

In addition, the Undergraduate Cancer Training Program staff participates in the teaching of neoplasia to the sophomore students. This is done as a supplementary program to the students as they are being taught the principles of neoplastic disease by the Department of Pathology. New material is presented to them and here the clinico-pathological approach to the problem of neoplasia has special emphasis. In this phase of the program it has not been possible to cover the entire body but selected regions are utilized.



# Duke Hospital



## *Internships and Residencies*

Internships of twelve months' duration with room, board, laundry, and uniforms furnished but without salary, are available in medicine, surgery (including general surgery, urology, orthopaedics, plastic, anesthesia, thoracic, and neuro-surgery), orthopaedics, urology, otolaryngology-ophthalmology, dentistry, obstetrics and gynecology, endocrinology, pediatrics, neuropsychiatry, and pathology commencing July first.

Application blanks for all internships may be obtained by writing to the Superintendent, Duke Hospital, Durham, N. C. Graduates of any Class A medical school are eligible for internships.

After the completion of an internship in Duke Hospital or in another acceptable hospital, a certain number may be appointed as assistant residents in medicine, surgery, obstetrics and gynecology, pediatrics, psychiatry, neurology, dermatology, orthopaedics, urology, otolaryngology, ophthalmology, roentgenology, anesthesiology, pathology, biochemistry, or the Student Health Service or as fellows of the Private Diagnostic Clinic, at a salary of \$250 to \$500 per year with maintenance, and eventually may be promoted to the residency in the various departments or subdepartments of the Hospital at an annual salary of \$500 to \$1,000 with maintenance. Applications should be made to the head of the department concerned.

The Hospital and School of Medicine are an integral part of the Duke University campus, and its educational, recreational, and athletic facilities are available for the Resident Staff.

The present Resident Staff of one hundred nine consists of a resident, twelve assistant residents, and nine interns in medicine; a resident and two assistant residents in dermatology and syphilology; an assistant resident in neurology; five assistant residents in neuropsychiatry; a resident, five assistant residents, and thirteen interns in surgery (the five assistant residents are assigned in rotation to general surgery, plastic, thoracic, neuro-surgery, and pathology); a resident, two assistant residents, and one intern in otolaryngology and ophthalmology; a resident and one assistant resident in orthopaedics; a resident and one assistant resident in urology; a resident and one assistant resident in plastic surgery; a resident, four assistant residents, and

three interns in obstetrics and gynecology; a resident and one intern in endocrinology; a resident, three assistant residents, and eight interns in pediatrics; three interns in obstetrics and pediatrics; two residents and four assistant residents in radiology; a resident, two assistant residents, and three interns in pathology; four assistant residents in anesthesiology, and eight in hospital administration.

### *Postgraduate Study*

Graduates in medicine are welcomed at the various clinics and demonstrations in medicine, surgery, obstetrics, and other specialties, which are held from 9:30 A.M. to 12:30 P.M. each Saturday, as well as at the daily ward-rounds in the mornings, and the out-patient clinics in the afternoons. They can start at any time and remain as long as they wish. Additional special work in any department for a period of not less than three months may be arranged by consultation with the head of the department concerned. A certain number of residencies also are available at Duke Hospital in medicine, surgery, obstetrics and gynecology, pediatrics, psychiatry, neurology, dermatology, orthopaedics, urology, otolaryngology, ophthalmology, roentgenology, pathology, and biochemistry. Further information can be obtained by writing to the Dean.

Returning veterans are requested to register on arrival at the Dean's office, Room M133, and with Miss Barbara L. Perkins, 302 Administration, who will assist them in obtaining the benefits of the G. I. Bill of Rights, which will provide tuition and \$75 per month for maintenance (\$105 if one dependent, \$120 if more than one dependent).

### *School of Hospital Administration*

Eight internships in hospital administration leading to a certificate will be available to university graduates whose character, tact, and ability for leadership are good, and whose academic standing is high. These internships are of two years' duration and pay a small salary in addition to room, board, and laundry. Vacations of two weeks are allowed during each year of internship.

The instruction is practical rather than theoretical in emphasis. The interns are rotated through six different assistant administrative positions in the Hospital. There is also a weekly seminar lasting two hours.

During these two or three years, the interns may also register in the Graduate School of Duke University, and receive the A.M. degree

after the successful completion of a thesis and twenty-four semester hours of university courses in various fields. This additional work will add one year to the program. Further information may be obtained by writing to the Superintendent, Duke Hospital, Durham, N. C.

### *School of Nursing*

The next class of students will be admitted to the Duke University School of Nursing on September 14, 1951, but applications will be considered at any time. Information about the entrance and other requirements, length of course, tuition, fees, application forms and bulletins may be obtained by writing to the Dean of the School of Nursing, Box 3714, Duke Hospital, Durham, N. C.

### *School of Dietetics*

In addition to the dietetic training of the students of the Schools of Medicine and Nursing, fourteen dietetic interns may be admitted to the School of Dietetics and given the certificate of graduate dietitian after the successful completion of one year's internship. The entrance requirements are a Bachelor's degree from an approved university or college, with majors in nutrition and institutional management, and the courses in chemistry, biology, social science, and education recommended by the American Dietetic Association. The course for dietetic interns provides instruction in all phases of hospital and institutional dietetics, including experience from the buying and storage of food to its service to the patients according to the physician's orders. Interns may apply some of their time in securing graduate credit.

The course starts the first of September. All students pay a registration fee of \$10 at the time of appointment. Additional fees are charged if the intern takes additional work in the University for an advanced credit. Maintenance is provided. More detailed information and application blanks may be obtained from the Professor of Dietetics, Duke University School of Dietetics, Durham, N. C.

### *Medical Social Service*

Medical social case-work service is offered to patients referred by personnel within the Hospital, and by interested individuals and health and welfare agencies outside of the Hospital. Assistance and advice in

connection with the problems presented are available to the members of the Staff and referring agencies.

The division also assists in teaching social and environmental aspects of illness and medical care through consultations and lectures to the students of the Schools of Medicine and Nursing. In addition, it serves as an agency for supervised field work for students of the Graduate School of Social Work of the University of North Carolina. Further information concerning training for advanced students may be obtained from the Social Service Division, Duke Hospital, Durham, N. C.

### *Anesthesiology*

A two- to three-year residency training program in Anesthesiology is available for physicians who are graduates of a Class A medical school and who have completed an internship in an accredited hospital. This is an approved residency which after two years qualifies the resident to write the American Board examinations. Applicants are accepted January 1st and July 1st. Opportunities are provided to employ all the varied techniques and agents utilized in anesthesia. Emphasis is placed on knowledge of the various diagnostic and therapeutic nerve blocks, and opportunity is provided to learn the standard regional nerve block procedures. Facilities are available for clinical and experimental research. Seminars are held twice a week for theoretical instruction and review of interesting cases and journals.

Courses available to graduate nurses include an eighteen months' course for nurses who have had no experience in anesthesia, and a nine to twelve months' course for nurses with five years of practical experience who have not had formal training in the specialty. Instruction embraces the theoretical aspects and clinical application of all drugs and techniques in accepted usage. The program is divided into quarters. The major part of the basic theoretical instruction is given during the first three quarters. After a pre-clinical period of eight weeks, clinical practice runs parallel with the theoretical program. One class is accepted annually and enrolled on January 15. All appointments for the current year are made by September 1 of the preceding year. Graduates of these courses are eligible to take the examination given by the American Association of Nurse Anesthetists. Tuition is \$150.00 and \$100.00 respectively. Additional information concerning these programs for nurses may be obtained from Mary H. Snively, R.N., Box 3094, Duke Hospital, Durham, North Carolina.

### *Course in Laboratory Technique*

The course in laboratory technique, which includes training in blood chemistry, clinical microscopy, bacteriology, serology, basal metabolism, etc., is approved by the Registry of Technicians of the American Society of Clinical Pathology. The course lasts twenty-one months, the next class starting September 17, 1951. The registration fee is \$250, and there are no additional charges except for breakage and student health. The students live in town at their own expense. A minimum of two years of approved college work is required. The degree of B.S. in Medical Technology is awarded upon successful completion of the course. Information as to the specific requirements may be obtained from Dr. Haywood M. Taylor, Duke Hospital, Durham, N. C.

### *Course in X-Ray Technology*

Applicants for training in x-ray technology should satisfy one of the following requirements: A.B. or B.S. degree, or Diploma of Graduate Nurse, or special students without either of these requirements who might be appointed by the committee. The course is of twenty-four months' duration and the following subjects are presented: elementary anatomy and physiology, physics, x-ray equipment, dark room chemistry and procedure, x-ray technics and general office routine. Examination is given at the end of the first quarter and a grade of 75 must be made to continue the course. Two students are appointed in October and two in March each year. The tuition fee is \$25. No maintenance is provided. This course is approved by the American Council of Medical Education, American Medical Association, the American College of Radiology and the American Registry of Radiological Technicians.

### *Physical Therapy*

A fifteen months' course in physical therapy is offered for men and women graduates of accredited schools of physical education and nursing, and for selected applicants who have completed ninety college semester hours, including credit in the biological sciences, physics, chemistry and psychology. The curriculum provides instruction in



anatomy, physiology, kinesiology, pathology, psychology, electrotherapy, neuropsychiatry, therapeutic exercise and the principles of rehabilitation. Instruction in the clinical subjects is given by members of the faculty of the School of Medicine. Clinical training will be given at Duke Hospital and affiliated institutions and includes supervision of orthopaedic problems in the Durham Public Schools. The course starts in October. The tuition fee is \$350 plus \$35 for medical fee, and does not include maintenance. A certificate is awarded upon successful completion of the course. Eighteen hours of credit may be earned toward the baccalaureate degree.

In addition to the above, a six months' course in the Psychosomatic Aspects of Physical Therapy is given to registered graduate physical therapists. The course includes a study of personality structure, adjustment, tensions, anxiety and their relation to patient behavior and management. The tuition fee is \$150.00. A certificate is awarded. Courses are given to the students of the Schools of Medicine and Nursing. Further information and application blanks may be obtained from the Division of Physical Therapy, Duke Hospital, Durham, N. C.

### *Medical Record Library*

A twelve months' course for the training of medical record librarians which has been given full approval by the American Association of Medical Record Librarians and the American Medical Association, includes three months of classes and nine months of internship with rotation through inter- and extra-departmental stations. Applicants are judged individually for eligibility, and education, training, and experience are all taken into consideration. The curriculum provides instruction in the theory of medical record library science, and an introduction to anatomy, physiology, pathology, medical and operative terminology, and medical diction. Instruction is given by members of the faculty of the School of Medicine, with special lectures on hospital management and correlation of various hospital departments, as well as seminars on legal aspects and administrative uses of medical case records. Internship includes application of class work in actual practice and covers all phases of medical record library work. The course starts in October. The tuition fee is \$175.00 and does not include maintenance. A certificate is awarded upon successful completion of the course. Applications may be made to the Medical Record Librarian, Box 3307, Duke Hospital, Durham, N. C.

### *Division of Medical Art and Illustration*

The primary function of this Division is to produce visual clinical records for supplementation of case histories, visual aids for teaching, illustrations for publication, and accurate drawings of conditions in which draftsmanship, knowledge of subject and imagination are the prime requisites. Requests for this work may emanate from any of the medical or allied sciences. Other services offered are: the production of exhibits, casts, models, prosthetic appliances, tantalum plates, charts, graphs, mechanical drawings, clinical photographs (still), motion pictures, photomicrography, fundus photography, copying, lantern slides, prints in black and white and color and special problems in infra-red.



# THE SCHOOL OF NURSING

Fall Semester begins September 20, 1951

Spring Semester begins January 30, 1952

# The School of Nursing



## *General Information*

The School of Nursing of Duke University was established in 1931 in association with the School of Medicine of the University and Duke Hospital through the gift of the late James B. Duke. The administrator of the School of Nursing is a member of the Executive Committee of the Medical School, Nursing School and Duke Hospital which promotes the common interests of the three organizations.

The central aim of the educational program is to select young women with aptitudes, interests and personal characteristics needed in nursing, and to provide an educational program enabling them to develop skills, knowledge and attitudes needed for professional nursing service in the community and for maximum personal development.

This program is designed to prepare nurses for:

1. General duty in hospitals.
2. Private duty in hospitals and homes.
3. First level positions under supervision in public health nursing agencies.

## *Facilities for Instruction*

The facilities for instruction include the facilities for instruction available in the undergraduate, professional and graduate schools and colleges of Duke University and the clinical facilities of Duke Hospital.

## *Clinical Facilities*

Duke Hospital has every modern convenience for the diagnosis, proper nursing care, welfare and comfort of the patients including 604 hospital beds, a large public out-patient department, a large private diagnostic clinic and offices and examining rooms for the doctors who serve on the staff of the hospital. There are very close relationships established between the hospital and the Health Departments in North Carolina. A system for referral of patients to the nursing service of the Health Departments has been established between the supervisors of the nursing service in the hospital and the nursing service of the Health Department.



The beds in Duke Hospital are assigned to the various services as follows: Medicine, including dermatology and neurology, has 75 ward beds; surgery, including urology, otolaryngology, ophthalmology, and orthopaedics, 148 ward beds; obstetrics, including gynecology, 56, and 50 bassinets; neuropsychiatry, 27; and pediatrics, 40. There are 222 private and semi-private rooms, 7 air-conditioned operating rooms, and 4 obstetric delivery rooms. Except for emergencies, all patients are admitted to the hospital from either the out-patient clinic or the private diagnostic clinic.

The hospital has been approved for internships and residencies by the Council on Medical Education and Hospitals of the American Medical Association.

The out-patient department has an average of 353 visits per day. All services including psychiatry carry on an active program in the out-patient departments. Students are assigned to the out-patient department for at least four weeks during their program in the School of Nursing. The first assignment is in the first year, to give the student some knowledge of the background of her patients; subsequent assignments are made concurrent with the experience on each service.

### *Libraries*

The reference library of 2,298 books and periodicals of special interest to students majoring in nursing is located in Baker House. Students may use the general libraries on the East and West Campuses and the Duke Hospital Library. A collection of visual aids including films is being assembled with an index in the library for the use of students and instructors in the School of Nursing.

### *Application for Admission*

Applications for admission to the School of Nursing should be made to the Committee on Admissions of the School of Nursing, Box 3714 Duke Hospital, Durham, N. C. Application forms will be sent on request.

### *Admission*

Since the profession of nursing requires women with a high sense of integrity and responsibility, with culture and intelligence whose predominant interest is service, the Admissions Committee will select the applicants who, in its opinion, seem best qualified for nursing. The Admissions Committee must have on file the records indicating the fulfillment of the following requirements before considering an applicant.

1. Graduation from high school with sixteen units of credit as indicated.
2. One year of college with the semester hours of credit as indicated.
3. Aptitude and achievement tests.
4. Three recommendations.
5. Interviews.
6. Physical and dental examination.

### *Specific Requirements*

I. An applicant for admission to the School of Nursing must present at least sixteen acceptable units of secondary school credit. A unit of credit is allowed for a course of study pursued throughout an academic year at an accredited secondary school, if the course has been completed satisfactorily.

1. Twelve units must be in English, foreign language, history and social studies, mathematics, and natural science; and must include:
  - (a) English—3 units.
  - (b) Algebra—1 unit.
  - (c) Plane geometry—1 unit.
2. Four units may be in the subjects listed above or from those in the following table. The units indicate the maximum amount of credit acceptable in each subject:

<i>Subject</i>	<i>Units</i>	<i>Subject</i>	<i>Units</i>
Agriculture .....	2	Mechanical Drawing .....	2
Art .....	1	Music .....	1
Commercial Subjects .....	3	Physical Geography .....	1
Economics .....	1	Sociology .....	1
Household Economics .....	2	Woodworking, Machine Work .....	2

Other units offered in subjects not included in this list will be considered for acceptance on the basis of full statements transmitted with the applicant's record from the school recommending her.

If students make satisfactory scores on a scholastic aptitude test, the above requirements will not be rigidly adhered to by the School of Nursing.

II. One year of college work is required for admission to the Duke University School of Nursing. This work may be taken at any accredited college or university and should include the following courses:

	<i>S.H.</i>
English .....	6
Chemistry .....	8
Zoology or Biology .....	4
History, Economics or Political Science .....	6
Electives (Foreign Language, Literature, Mathematics, Religion, History, Appreciation of Art or Music and Physical Education) .....	8

Students who wish to complete requirements for the degree of Bachelor of Arts after graduation from the School of Nursing should take six credits of foreign language during the freshman year. Those who submit two or more units of one language in high school are advised to continue with that language in college. If the college will not allow two sciences in the first year, chemistry is preferred.

III. Satisfactory scores on a battery of aptitude and achievement tests.

IV. Three recommendations, two of which must come from recent high school or college instructors.

V. Interviews with two members of the Duke University School of Nursing faculty, whenever possible.

VI. Records of recent physical and dental examination.

A physical examination at Duke Hospital is required for final acceptance into the School of Nursing. This examination includes a chest x-ray and a tuberculin test.

Students who attend college more than one year before entering the School of Nursing are advised to take the following courses:

	S.H.
Literature .....	6
Psychology .....	3-6
Sociology .....	3-6
Religion, Ethics or Philosophy .....	6
Language (second year of same language taken in first year) .....	6
Electives (Physical Education) .....	2-8

### *Fees and Expenses*

	<i>First Year</i>	<i>Second Year</i>	<i>Third Year</i>
Tuition .....	\$100.00	\$100.00	\$100.00
Books (Estimated) .....	40.00	10.00	10.00
Pre-entrance tests .....	5.00		
Activities .....	15.00	15.00	15.00
Graduation .....			3.00
Diploma .....			5.00
Degree .....			5.00
Cap and Gown Rental .....			1.25
Room Key Deposit .....	1.00		
Uniforms .....	84.20		
	<hr/> \$245.20	<hr/> \$125.00	<hr/> \$139.25

The fee for pre-entrance tests and health examination is payable at time testing is done. Checks should be made payable to Duke University.

No student is permitted to attend classes until she has complied with all regulations concerning registration and payment of bills for the term.

Arrangements for purchase of uniforms are made with the uniform company late in September. At that time, \$68.70 of the cost of the uniforms is paid.

A fee for public health nursing will be added in the senior year when arrangements for the experience are completed.

Duke Hospital provides board, room and laundry for students in the School of Nursing. The rooms in the residence are fully equipped. Twenty-five dollars of the tuition fee is payable upon receipt of the acceptance letter, the balance is due upon admission.

Fees for courses which require registration in the Woman's College are charged upon the basis of hours of credit.

### *Readmission*

Students who are absent for more than one month on account of illness or have leave of absence may be readmitted to the same or a succeeding class at the discretion of the faculty.

### *Leave of Absence*

Students are not expected to leave the School because of family or other personal reasons. Absence from the School is granted only in extreme cases. If a student is obliged to be away for a period exceeding four weeks, the Dean of the School of Nursing will determine the date of her return and the question of resuming her place in her original class.

### *Dismissal*

The faculty of the School of Nursing may, at any time, place a student on probation or release her from the School if, in its opinion, she does not have the qualifications necessary for the profession.

# Program of the School of Nursing



THE program of the School of Nursing covers a period of three calendar years with one month of vacation each year. At the completion of this program, the student receives the diploma in nursing and is then eligible for the examinations given by the North Carolina State Board of Nurse Examiners. The School is fully approved by the North Carolina Joint Committee on Standardization.

## *Combined Academic-Professional Programs in Nursing*

Students who have been graduated from the Duke University School of Nursing with an average grade of "C" or better may, upon recommendation by the Dean of the School of Nursing, apply for admission to the Woman's College of Duke University. If accepted she may obtain the degree of Bachelor of Arts or Bachelor of Science from Duke University by fulfilling the requirements for the degree of choice. Forty semester hours of credit toward these degrees are given for the three-year nursing program or toward the degree of Bachelor of Science in Nursing Education for those showing ability in teaching.

The program of studies leading to the degree of Bachelor of Arts is as follows:

### 1. Minimum requirement of the Undergraduate College of Arts and Science:

	S.H.
English 1-2 .....	6
Natural Science .....	8
Language (completion of the third college year) .....	6-18
Religion .....	6
History, Economics or Political Science .....	6

---

32-44

- |  |       |
|--|-------|
| 2. Basic nursing program .....   | 40    |
| 3. At least twelve semester hours in one department other than nursing in courses not primarily open to freshmen ..... | 12    |
| 4. Electives .....   | 24-36 |

In addition to twelve semester hours in one department, the program must include 24 semester hours in courses numbered 100 or above.

A total of 124 semester hours credit and 124 quality points is required for graduation.



Students who have been graduated from the Duke University School of Nursing may obtain the degree of Bachelor of Science by fulfilling all requirements for that degree. Forty semester hours of credit toward this degree are given for the three-year program in the School of Nursing. The requirements for this degree may be found in the bulletin of the undergraduate colleges.

### *Admission With Advanced Standing in the Woman's College*

Students from the School of Nursing who are admitted to the Woman's College may receive credit for college courses taken prior to their admission to the School of Nursing provided they meet the requirements listed below.

A student enrolling for the Bachelor's degree, who transfers from a junior college or from a four-year college not affiliated with the Southern Association or a similar regional association, is under all circumstances required to continue, for at least one semester in the Woman's College the foreign language she presents for minimum graduation requirements. Note: No foreign language is required for the B.S. in Nursing Education.

Credit for courses in science offered for advanced standing by a student transferring from a junior college or from a four-year college not affiliated with the Southern Association or a similar regional association will be determined by the departments concerned.

Transfer credits are tentatively evaluated pending the completion of two semesters work in residence. To validate provisional credits the student must earn at least an average of "C" in a normal load of work. Transfer grades of "C" or above are rated at one quality point per credit hour when validated.

The maximum amount of credit acceptable from a junior college is sixty semester hours, exclusive of physical education. No credit is given for work completed by correspondence, and not more than six semester hours credit is allowed for extension courses. Any extension work accepted must be specifically approved by the Dean of the College.

*The Curriculum—Basic Program*

<i>Title of Course</i>	<i>Clock Hours</i>	<i>Related Clinical Experience</i>
1st year—1st semester		
Anatomy and Physiology .....	64	
Physiological Chemistry .....	48	
Nutrition and Cookery .....	48	
Social Psychology .....	32	
Introduction to Nursing .....	16	Ward practice in nursing procedures
Nursing Arts .....	96	2 weeks vacation
1st year—2nd semester and summer session		
Anatomy and Physiology .....	48	
Microbiology .....	64	
Social Psychology .....	32	Ward practice in nursing procedures
Nursing Arts .....	64	Ward practice in medical and surgical nursing
Medical and Surgical Nursing I ..	128	
Orientation to Health Field .....	48	3 weeks vacation
2nd and 3rd years		
Medical and Surgical Nursing II ..	64	9 weeks operating room
Obstetrical and Gynecological Nursing .....	48	6 weeks diet kitchen
Pediatric Nursing (including Communicable Disease Nursing)	48	12-16 weeks obstetric and gynecology
Child Growth and Development ..	32	12-16 weeks pediatrics
Psychiatric Nursing .....	48	12-16 weeks psychiatry
Social Foundations of Nursing ...	48	3 weeks out patient
Public Health Nursing .....	48	16 weeks on campus
		(elective classes may be taken in Woman's College, Duke University, during this period)
		7 weeks vacation
		22 weeks medicine and surgery

# Description of Courses



ANATOMY AND PHYSIOLOGY.	DR. MARKEE, DR. SAWYER, MISS SMITH
PHYSIOLOGICAL CHEMISTRY.	DR. TAYLOR
MICROBIOLOGY.	DR. CONANT
NUTRITION AND COOKERY.	MISS YEARICK
INTRODUCTION TO NURSING.	MISS INGLES
NURSING ARTS.	MISS CRAWLEY, MISS BASON, MRS. BROCK, MRS. ANDERSON
SOCIAL PSYCHOLOGY.	MISS JEFFERS: Special Lectures
INTRODUCTION TO HEALTH FIELD.	MISS MASSEY
CHILD GROWTH AND DEVELOPMENT.	DR. HOHMAN
SOCIAL FOUNDATIONS OF NURSING.	MISS WILSON
MEDICAL AND SURGICAL NURSING I AND II.	MISS OSTERMAN
PEDIATRIC NURSING.	MRS. ECKERT
OBSTETRICAL NURSING.	MISS HENDERSON
PSYCHIATRIC NURSING.	MRS. FLEMING, DR. GOLDSMITH
PUBLIC HEALTH NURSING.	MISS MASSEY

# Division of Nursing Education



## *Advanced Professional Programs*

A DIVISION of Nursing Education was established in December, 1944, as an integral part of the Department of Education of Duke University. At the present time, qualified graduate nurses may work toward the degree of Bachelor of Science in Nursing Education.

The primary objective of the degree program for graduate nurses is to prepare qualified individuals for teaching and supervisory positions in schools of nursing and in nursing service agencies. Facilities for instruction include the undergraduate colleges of Duke University, the School of Nursing, the Medical School and Duke Hospital.

### *I. Degree of Bachelor of Science in Nursing Education*

#### ADMISSION

Students who wish to work toward the degree of Bachelor of Science in Nursing Education must apply for admission to the Woman's College of Duke University. To be accepted they must satisfy the following requirements with respect to their high school education:

1. Graduation from an approved secondary school with at least fifteen acceptable units of credit.
2. Twelve units must be in English, foreign language, history and social studies, mathematics and natural science.
3. Three units may be in subjects listed above or in such subjects as art, commercial subjects, household economics, or music.

Students who have satisfactorily completed one or more years of college work in an approved college or university must also fulfill the requirements listed above with respect to high school credit, must present official transcripts of all work done in other institutions, and must have honorable dismissal from each institution previously attended.

Other basic minimum requirements include:

4. Graduation from an approved school of nursing.
5. Satisfactory ratings from individuals, with whom the applicant has had fairly recent contact.

## OUTLINE OF PROGRAM

Credit for 120 semester hours (exclusive of physical education) on which an average grade of at least "C" is made is required for the degree of Bachelor of Science in Nursing Education. The work of the final year must be taken in residence at Duke University. One year of experience as a graduate nurse is required before the degree is awarded. The program of studies leading to this degree must include:

1. Minimum general education requirements (may be satisfied at Duke University or at any accredited college or university).

	S.H.
English 1-2 .....	6
Natural Science .....	8
History, Economics or Political Science .....	6
Sociology .....	3-6
Psychology .....	3-6
Electives .....	12-15
(Literature, art, music, religion, ethics, language)	<hr/> 44

2. Basic Nursing Program ..... 40 (maximum)

In evaluating credit the standing of the School of Nursing, the record of the individual student, and scores on basic nursing achievement tests administered by the Department of Measurement and Guidance of the National League of Nursing Education to all candidates as soon as they enroll in their first course are taken into consideration.

3. Courses in Education and Nursing Education.

	S.H.
88. Educational Psychology: Learning and Measurement .....	3
118. Educational Psychology: Psychological Development .....	3
84N. Social Foundations of Nursing Education .....	3
101N. The Curriculum of the School of Nursing .....	3
115N. } Nursing Education—Principles and Practices .....	8
116N. }	
117. Community Nursing—Seminar and Field Trips to Community Agencies .....	3
	<hr/> 23

4. Minimum of fifteen semester hours in one field, such as zoology, chemistry, physics, sociology, or psychology, or in a clinical area.

The following courses in clinical areas are offered at present:

	S.H.
130N. Psychosomatic Nursing .....	4
131N. } Psychiatric Nursing .....	8
132N. }	
133N. Seminar in Psychiatric Nursing .....	3
134N. } Medical and Surgical Nursing .....	8
135N. }	
136N. Seminar in Medical and Surgical Nursing .....	3

Other courses which are offered to graduate nurses are as follows:

192N. Principles and Methods of Teaching in School of Nursing .....	3
193N. Ward Administration and Teaching .....	3
195N. Personnel Work in Schools of Nursing .....	3
124N. Problem in Nursing Care .....	2



## *II. Degree of Master of Education With a Major in Nursing Education*

Nursing Education

(Not offered in 1951-52)

### ADMISSION

A student who wishes to work toward the degree of Master of Education with a major in Nursing Education must apply for admission to the Graduate School of Duke University. To be eligible for admission as a candidate for this degree she must meet the following requirements:

- (1) Graduation from an approved college or university with an average grade of not less than "B."
- (2) Satisfactory standing on the Graduate Record Examination.
- (3) Satisfactory standing on a test of mental ability.
- (4) Ability to write acceptable English as demonstrated on a test.
- (5) Graduation from an approved school of nursing.
- (6) Satisfactory ratings from three individuals, preferably former teachers and supervisors with whom the individual has had fairly recent contact.

### OUTLINE OF PROGRAM

Basic Required Courses in Education:	S.H.
300. Methods of Educational Research .....	3
304. The School as an Institution .....	3
305. The Nature, Function, and Reorganization of the Curriculum .....	3
317. The Psychological Principles of Education .....	3
	<hr/>
	12
Courses in Nursing Education:	
310. Organization and Administration of Schools of Nursing .....	4
311. Problems in Personnel Administration in Nursing .....	4
312. Research Problem .....	4
	<hr/>
	12
Minor, intra-departmental or extra-departmental .....	6
	<hr/>
	30

Candidates for the Master of Education degree must have had two years of experience including administration, supervision, or teaching in a school of nursing or nursing service organization when the degree is granted.

## *III. Tuition, Fees, and Other Expenses*

### FEE PER SEMESTER

A matriculation fee of \$20.00 is paid at the time of acceptance to Woman's College.

Tuition .....	\$175.00
General Fee (Undergraduate) including health, library and incidental fees .....	75.00
General Fee (Graduate School) .....	60.00
Laboratory Fee (amount depends upon course which is taken)	

### LIVING ARRANGEMENTS

Students may make their own arrangements to live in private homes. A limited number of students can be housed in the Graduate Nurses' Residence, 2204 Erwin Road. The cost of living in this residence is as follows:

Single room (per semester) .....	\$87.50
Double room (per semester) .....	67.50

Meals can be secured at a nominal rate at University cafeterias.

### EMPLOYMENT

A limited number of nurses may be employed at Duke Hospital during the time they are taking courses at Duke University. Nurses who are working full-time (44 hours per week) may take one course each semester. Nurses who wish to reduce hours of work per week to 36, with a corresponding reduction in salary, may take two courses each semester.

Full-time students in advanced medical and surgical nursing may work 18 hours per week for board and room with permission of instructor.

For information about employment write to the Director of Nursing Service, Duke Hospital.

## *IV. Program in Psychiatric Nursing*

A twelve-month program in psychiatric nursing is offered to qualified graduate nurses. The primary objective of this program is to prepare individuals for head nurse positions in psychiatric units of hospitals, child guidance clinics, and related fields. Students who wish to qualify for supervisory or teaching positions in the psychiatric field are advised to complete the program which leads to the degree of Bachelor of Science in Nursing Education.

Facilities for clinical teaching and experience include the psychiatric in-patient unit, the out-patient department, the psychosomatic service of Duke Hospital, child guidance clinics, and the State Hospital in Raleigh, N. C.

Students have approximately 20 hours per week of carefully planned laboratory practice on clinical services, during which time they work closely with patients presenting a wide variety of emotional disturbances. They also have an opportunity to participate in staff conferences and clinics at Duke Hospital and at the State Hospital in Raleigh.

Approximately 30 semester hours of credit toward the Bachelor of Science in Nursing Education degree may be earned during the calendar year.

A limited number of training stipends are available through the U. S. Public Health Service for those nurses who have demonstrated particular interest and aptitude in this field.

Requirements for admission are the same as for all students admitted to the program which leads to the degree of Bachelor of Science in Nursing Education.

### OUTLINE OF PROGRAM (ONE YEAR)

Fall Semester		Credits
Educ. 130N	Psychosomatic Nursing .....	4
Educ. 131N	Psychiatric Nursing .....	4
Soc. 101	General Sociology .....	5
Educ. 84N	Social Foundations of Nursing Education .....	3
		<hr/> 16
Winter Semester		
Educ. 132N	Psychiatric Nursing .....	4
Educ. 120N	Problem in Nursing Care .....	2
Educ. 193N	Ward Administration and Teaching .....	3
Psych. 116	Psychology of Adjustment .....	3
		<hr/> 12
Summer		
Educ. 133N	Seminar in Psychiatric Nursing .....	3

## *V. Program in Medical and Surgical Nursing*

A twelve-month program in medical and surgical nursing is offered to qualified graduate nurses. The primary objective of this program is to prepare individuals for head nurse positions in medical and surgical units of hospitals. Credit for the entire program applies toward the degree of Bachelor of Science in Nursing Education. Students who are interested in teaching and supervision in medical and surgical nursing are urged to complete all requirements for the degree.

### OUTLINE OF THE PROGRAM

<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
130N Psychosomatic Nursing ..	4	193N Ward Administration and Teaching .....	3
134N Medical and Surgical Nursing .....	4	135N Medical and Surgical Nursing .....	4
84N Social Foundations of Nursing Education ....	3	117N Community Nursing ....	3
Elective .....	3-6	Elective .....	3-6
<hr/> 14-17		<hr/> 13-16	

### SUMMER SESSION

S136N Seminar in Medical and Surgical Nursing .....	3
S124N Problem in Nursing Care .....	2

The courses in medical and surgical nursing and in psychosomatic nursing will include from four to 16 hours per week of field work in medical and surgical divisions and medical and surgical out-patient clinics of Duke Hospital, and with various community health and social agencies. Students who are interested in a particular medical or surgical specialty (orthopaedic nursing, neurosurgical nursing, etc.) may have added experience in that area during the summer months. For some students experiences in other hospitals may be arranged.

Requirements for admission are the same as for all students admitted to the program which leads to the degree of Bachelor of Science in Nursing Education.

## *VI. Clinical Program in Operating Room Nursing*

A program in operating room nursing of nine months in length is offered to qualified graduate nurses who are interested in preparing for head nurse positions in an operating room.

### ADMISSION

An individual who is interested in the program in operating room nursing must apply for admission to the Woman's College of Duke University as a *special* student. To be admitted as a special student the following records are required:

1. Transcript of high school or of college record.
2. Transcript of nursing school record.
3. Satisfactory rating from a nursing service administrator or supervisor with whom the applicant has had recent contact.

In addition to the above requirements an applicant must have had a minimum of six months' experience as an operating room nurse.

### OUTLINE OF PROGRAM

#### \*Courses in Nursing Education and Related Subjects

	<i>Credits</i>
84N. Social Foundations of Nursing Education .....	3
120. Problem in Nursing Care .....	2
193. Ward Administration and Teaching .....	3
195. Personnel Work in School of Nursing .....	3
Elective .....	3
	<hr/> 14

### CLASSES AND RELATED EXPERIENCE IN OPERATING ROOM NURSING

The course in operating room nursing includes 60 hours of organized class work during the period of nine months and an average of 36 hours each week on duty, of which 18 hours is supervised experience. The class work includes a discussion of the facts and principles

\* Credit toward the degree of B.S. in Nursing Education is given for these courses.

of chemistry, bacteriology, anatomy and physiology, underlying preparation for and assistance with surgical operations, both general and special. The history of anesthesia is presented, as well as present day trends and developments in the field.

In the related field work the nurse becomes acquainted with the functions of various departments of the hospital and their relationship to the operating room. She has an opportunity to prepare for and assist with various surgical operations including general surgery, chest surgery, neuro-surgery, orthopaedic surgery, urological surgery, plastic surgery and eye, ear, nose and throat surgery. She is also given an opportunity to assist with administrative and supervisory functions in the operating room, and with planning and conducting a teaching program for students and others.

### FEES

Each student pays the regular University fees for courses in Nursing Education and related subjects. The fee per credit hour is \$12.00 (1949-50). In addition a matriculation fee of \$5.00 is paid each semester.

### LIVING ARRANGEMENTS

Students who are taking the course in operating room nursing receive full maintenance in return for service to the hospital.

### HEALTH CARE

Each student is required to carry hospitalization insurance to cover the cost of hospitalization during illness.

A sick leave of seven days is given during the nine months period.

### DATES OF ADMISSION

Students are admitted to the program in operating room nursing at the beginning of each semester.

### CERTIFICATE

At the completion of the nine months program in operating room nursing the student is granted a certificate.

### INFORMATION

For further information about any program write to Director of the Division of Nursing Education, Duke Hospital, Durham, North Carolina. Application for admission to the Woman's College should be made to the Committee on Admissions, College Station, Durham, North Carolina.



# Description of Courses



- 84N. SOCIAL FOUNDATION OF NURSING EDUCATION.—3 s.h.  
ASSISTANT PROFESSOR INGLES
- 101N. THE CURRICULUM IN THE SCHOOL OF NURSING.—3 s.h.  
ASSISTANT PROFESSOR SMITH, ASSISTANT PROFESSOR INGLES
- 115N-116N. NURSING EDUCATION: PRINCIPLES AND PRACTICE.—8 s.h.  
ASSISTANT PROFESSOR SMITH
- 117N. COMMUNITY NURSING SERVICE.—3 s.h. ASSISTANT PROFESSOR MASSEY
- 120N. NURSING EDUCATION: PROBLEMS IN NURSING CARE.—3 s.h.  
ASSISTANT PROFESSOR INGLES, ASSISTANT PROFESSOR MOSER
- 124N. NURSING EDUCATION: TEACHING OF THE NURSING ARTS.—  
3 s.h. STAFF
- 130N. PSYCHOSOMATIC NURSING.—4 s.h. ASSISTANT PROFESSOR MOSER
- 131N-132N. PSYCHIATRY AND PSYCHIATRIC NURSING.—8 s.h.  
ASSISTANT PROFESSOR MOSER
- 133N. SEMINAR IN PSYCHIATRIC NURSING.—3 s.h.  
ASSISTANT PROFESSOR MOSER
- 134N-135N. ADVANCED MEDICAL AND SURGICAL NURSING.—8 s.h.  
ASSISTANT PROFESSOR INGLES
- 136N. SEMINAR IN MEDICAL OR SURGICAL SPECIALTY.—3 s.h.  
ASSISTANT PROFESSOR INGLES
- 192N. PRINCIPLES AND METHODS OF TEACHING IN SCHOOLS OF  
NURSING.—3 s.h. ASSISTANT PROFESSOR SMITH
- 193N. WARD ADMINISTRATION AND TEACHING.—3 s.h.  
ASSISTANT PROFESSOR INGLES
- 195N. PERSONNEL WORK IN SCHOOLS OF NURSING.—3 s.h.  
ASSISTANT PROFESSOR SMITH

# Public Health Nursing



SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF NORTH CAROLINA  
CHAPEL HILL, N. C.

## *Public Health Nursing*

The program of study in Public Health Nursing is designed to prepare registered professional nurses to carry on the functions of public health nursing in local health departments, visiting nurse associations, or joint health agencies.

Curricula leading to a certificate or baccalaureate degree in Public Health Nursing are offered.

### REQUIREMENTS FOR ADMISSION

#### *General:*

1. Ability to meet the regular entrance requirements of the University.
2. Graduation from an approved school of nursing offering a satisfactory theoretical and clinical experience.
3. Acquisition of the status of a registered nurse in any state.

#### *Specific:*

1. Candidates for the Certificate in Public Health Nursing:
  - (a) General requirements above.
2. Candidates for the degree of Bachelor of Science in Public Health Nursing:
  - (a) General requirements.
  - (b) Two years of prescribed academic work in an accredited university or college.
  - (c) Approval of the Committee on Admissions to the curriculum for the Bachelor of Science in Public Health Nursing.
3. Candidates for the Master of Public Health degree:

Graduation from an approved school of nursing and graduation with a bachelor's degree from an accredited college or university. The undergraduate program must have included at least eight courses in the natural sciences, and it is desirable that the student shall have had work in social science and education.

### PLAN OF INSTRUCTION

The calendar year's curriculum in Public Health Nursing is required of all majors in this field. While there is a prescribed curriculum of study, a program will be arranged on an individual basis with consideration for the educational and experiential background of the student. The program is so arranged that students are admitted in the Fall Quarter and are expected to remain for at least three consecutive quarters. With the approval of the Department, public health nurses with experience may be admitted in the summer provided they plan to remain for a minimum of three consecutive

quarters. Field work is an essential part of the program and is required for either the degree or the certificate. Exceptions may be made where a quarter of supervised field experience has been previously taken in an approved University program, or on approval of the curriculum committee.

### CURRICULUM IN PUBLIC HEALTH NURSING

<i>Required Courses:</i>	<i>Credit Hours</i>
P.H. 101 Epidemiology .....	3
P.H. 111 Public Health Administration .....	3
P.H. 114 Mental Hygiene .....	2
P.H. 131 Parasitism and Human Disease .....	3½
P.H. 141 Public Health Nutrition .....	3
P.H. 190 Principles and Practices of Public Health Nursing .....	5
P.H. 191 Public Health Nursing Organization and Administration ....	5
P.H. 192 Group Work: Its Interpretive Factors .....	3
P.H. 193 Applied Public Health Nursing Field Practice .....	15
P.H. 195 The Public Health Nurse in a Maternal Health Program ..	3
P.H. 196 Special Fields in Public Health Nursing .....	5
Soc. 51 An Introduction to Sociology .....	5
P.H. 198 Growth and Development of the Child .....	3
P.H. 118 Health and Sickness in Modern Society .....	3

For experienced students or graduates of university schools of nursing who have had an acceptable course in any of the above, an elective may be substituted.

### BACHELOR OF SCIENCE IN PUBLIC HEALTH NURSING

Because of the increasing demands of public health departments for nurses with a baccalaureate degree, it is desirable for students to enroll in the curriculum leading to the degree of Bachelor of Science in Public Health Nursing.

Candidates for this degree must fulfill the following requirements:

1. Satisfactory completion of 90 quarter hours (60 semester hours) in an accredited college or university. The amount of credit not exceeding 90 quarter hours extended for work in other colleges will be determined by the Committee on Admissions.
  - (a) *Required:*
    - 24 quarter hours in the natural sciences, selected from zoology, botany, chemistry, physics, psychology.
    - 20 quarter hours in English.
    - 10 quarter hours in the social sciences, selected from sociology, upper division psychology, history.
  - (b) *Electives:*
    - The departmental adviser will assist the student in the selection of the remaining courses (36 quarter hours) with reference to her individual needs.
2. Graduation from an approved school of nursing, with credit to be determined by the Committee on Admissions.
3. Satisfactory completion of the curriculum in Public Health Nursing in the School of Public Health at the University of North Carolina.

## TUITION AND FEES

The tuition is \$100.00 a quarter. This includes the following University charges for each quarter:

Matriculation .....	\$21.00
Student Activities .....	3.85
Special Library Fee .....	3.00
Woman's Association (women students only) .....	1.00

The laboratory fee for the field quarter in Public Health Education and Public Health Nursing is \$300.00 in addition to the \$100.00 tuition.

*Master of Public Health*

The course leading to the degree of Master of Science in Public Health is designed to provide a broad training in the basic health sciences and is intended to prepare students for professional careers in several vital fields of public health.

*Requirements for Admission:* For admission to the program of study leading to this degree students in nursing must satisfy with an acceptable record the following requirement:

1. Graduation from an approved school of nursing and graduation with a bachelor's degree from an accredited college or university. The undergraduate program must have included at least eight courses in the natural sciences, and it is desirable that the student shall have had work in social science and education.

*Requirements for the Degree:* The following are the principal requirements for the degree:

1. A period of residence of at least one academic year at the University. For nurses and health educators an additional period of three months devoted to field training under the supervision of the University is required. For other personnel the field training is at present optional.
2. The completion with high grades of an approved program of courses which includes public health administration, epidemiology, sanitation, bacteriology, and statistics. The course program shall involve credits of not less than 45 quarter-hours nor more than 60 quarter-hours.
3. A final written comprehensive examination in the field of the student's major interest, and a comprehensive oral examination on the entire program of study.

Candidates for this degree must complete all the requirements within six years from the time of their first matriculation in the program. Students completing their program over a period of years will be required to satisfy all requirements for the degree which are in effect in the final year of their work.





# THE SCHOOL OF FORESTRY

Fall Semester begins September 20, 1951

Spring Semester begins January 30, 1952

# Forestry in the Graduate School



MAJOR and minor work is offered in the scientific aspects of forestry leading to the A.M. and Ph.D. degrees, which are administered by the Graduate School of Arts and Sciences. Work for these degrees may be pursued only in forest-tree physiology, wood anatomy and properties, forest pathology, silvics, forest soils, forest mensuration, forest entomology, and forest economics. Students who have had specialized training in botany or soil science and in allied basic subjects, such as physics, chemistry, geology, and zoology, may pursue graduate study and research only in the specialized fields for which their previous work has qualified them. Students who do not have previous training in forestry will be required to complete a minimum of thirty semester hours of approved work in forestry as a preliminary requirement to advanced study for the A.M. and Ph.D. degrees. Holders of these degrees will not be regarded as professionally trained foresters.

Applicants for admission to the Graduate School must ordinarily have made, in their undergraduate work, not less than a "B" average and must not have concentrated excessively in one field of study to the detriment of a rounded program. They should have met substantially the requirements for the A.B. or B.S. degree at Duke University.

In addition to fulfilling the usual requirements for admission, the applicant must satisfy the Director of Graduate Studies in Forestry as to his liberal arts training, as well as to his preliminary training in the field of forestry.

For detailed information concerning admission to the Graduate School, and for regulations governing candidacy for the A.M. and Ph.D. degrees, language requirements, residence requirements, and other regulations concerning these degrees, the student should consult the *Bulletin* of the Graduate School of Arts and Sciences.

### *Educational Facilities*

The School of Forestry is located in the Social Science and Biology Buildings on the West Campus. The School is provided with instruments and tools for use in both field and laboratory work in silvics, silviculture, harvesting, and forest mensuration. Modern surveying instruments and accessory equipment are available for work in forest surveying.

Fully equipped laboratories are provided for work in wood anatomy and properties, timber mechanics, and bonding of wood. A modern forest soils laboratory equipped for physical and chemical studies is available. In the field of seasoning and preservation of wood a commercial-sized, single-compartment dry kiln and a fully equipped experimental pressure treating cylinder are available for instruction and research.

Facilities are also available for advanced work in plant physiology, plant anatomy, plant taxonomy, genetics, plant ecology, plant pathology, and the several branches of zoology.

The School of Forestry Library contains a growing collection of material on forestry and related subjects. It includes important books and periodicals in English and in French, German, and other foreign languages. The Library is well provided with American material, including Federal and State documents and reports. Over 150 periodicals and serials of importance in forestry and related fields are received by subscription or exchange.

Greenhouses, connected to the Biology Building through a soil-storage and work room, provide adequate space for experimental work.

A nursery has been established by the University for joint use of the Sarah P. Duke Floral Garden, the Botany Department, and the School of Forestry. The forestry section of this nursery is used mainly for the growing of planting stock for the Arboretum and trees needed for research or other special purposes.

West Virginia Pulp and Paper Company has made available to Duke University a field headquarters for work in forests of the South Atlantic Coastal Plain located 18 miles northwest of Summerville, South Carolina. This company has extensive forest holdings under close supervision of a staff of technical foresters in South Carolina and permits access to its lands for instruction and research in forestry and allied fields. This headquarters camp with modern facilities for as many as 45 men is used as a base primarily for utilization work each spring and for special work in silviculture. The quarters may be available at other times for students and faculty members of the Duke School of Forestry working on special problems or doing advanced work in any of the fields of forestry concerned with coastal plain

problems. The establishment of this headquarters camp in the coastal plain region makes it possible for the School of Forestry to provide instruction and conduct research in this important forest area in which many privately owned forests as well as public forests are intensively managed for the production and utilization of a wide range of forest products. The Southern Railway Demonstration Forest is within easy reach of this center and will also be available for work, particularly with longleaf pine.

The School sponsors occasional lectures on forestry and conservation by speakers of national reputation.

An active Forestry Club is maintained as a student organization to bring the members of the School and students in the undergraduate academic-forestry curriculum into closer contact and to afford opportunities for extracurricular activities not otherwise available.

### *The Duke Forest*

The Duke Forest, located in Durham and Orange counties, North Carolina, consists of five main units: namely, the Durham, New Hope Creek, Hillsboro, Eno, and Blackwood divisions. Early in the development of Duke University it was recognized that the possession of such an area offered an unusual opportunity for the development of educational work in forestry. For a detailed description of the Forest and the Arboretum see the *Bulletin of the School of Forestry*.

# Fellowships, Scholarships, and Graduate Assistantships in Forestry



A NUMBER of fellowships, scholarships, and research assistantships are available to men who offer promise of becoming leaders in the forestry profession. These will be awarded for high character and marked scholastic ability as judged by education, experience, and personal references. For more detailed information see the *Bulletin of the School of Forestry*.

## Tuition, Fees and Expenses



THE following tables show the general fees and charges collected from all students. All fees for each semester are due and payable, unless otherwise specified, at the time of registration at the beginning of that semester, and no student is admitted to classes until arrangements have been made with the Treasurer of the University for the settlement of fees.

### *General Fees*

Tuition, per semester .....	\$175.00
General Fee, per semester .....	60.00

Due to rising costs a readjustment in charges is being considered. In the event of an adjustment applicants will be notified.

TRANSCRIPTS: A student desiring to transfer from Duke University to another institution is entitled to one transcript of his record. A charge of one dollar is made for each additional copy.

PAYMENTS TO FELLOWS AND SCHOLARS: Payments by the University of stipends to fellows, research assistants, and scholars are made in four installments, on November 25, January 25, March 25, and



May 25. Fellows and scholars are required to pay the regular tuition fee and such additional fees as are ordinarily required of graduate students.

### LIVING ACCOMMODATIONS

Rooms for men are provided in the Graduate dormitory on the West Campus. Food service is cafeteria style. For more complete information see the *Bulletin of the School of Forestry*.

# Requirements for Admission to the School of Forestry



THE following general requirements of the School of Forestry apply to candidates for the Master of Forestry degree:

Admission to the School of Forestry presupposes that the applicant is either a graduate of a scientific school, college, or university of high standing, but without professional training in forestry; or that he is a graduate of a professional school of forestry. He will present not less than four years of credit of collegiate grade with at least one and one half times as many quality points as hours.<sup>1</sup>

An applicant with no professional training in forestry will present a certified transcript of his academic record showing that he has had conferred upon him a degree in arts, science, or engineering; and that he has satisfactorily completed undergraduate work in minimum amount as follows:

One year of botany, including the morphology, physiology, and identification of plants.

One year each of English composition and of chemistry.

One course each in physics and in the principles of economics.

Mathematics, through college algebra and trigonometry.

It is urged that an applicant without professional training in forestry present additional credits in the above subjects and in one or more of the following subjects: soils, geology, mineralogy, petrology, climatology, surveying, languages (particularly German and French), sociology, political science, philosophy, psychology, and zoology.

An applicant who is a graduate of a professional school of forestry will present a certified transcript of scholastic record showing the

<sup>1</sup> Grades for each hour of college credit and also for credit earned in the School of Forestry are valued in quality points as follows: "A," 3 points; "B," 2 points; "C," 1 point; "D," no points; and "F," no credit and —1 point.

award of a degree. Before registering for the first semester of residence, such applicants will be required to select the branch or branches of forestry in which they wish to concentrate the major part of their work and to prepare their proposed programs in conference with the appropriate faculty adviser.

Students must make application for admission in advance of the opening of the school year. Those students entering without acceptable courses in plane surveying, forest surveying, and forest mensuration must take the twelve weeks of work in these subjects in the Summer Session, and are required to submit their applications prior to May 1. Students entering with advanced standing in surveying and forest mensuration should make application before September 1. Application blanks will be sent upon request made to the Dean of the School of Forestry.

## Graduate Record Examination



ALL NEW applicants for admission to the School of Forestry will be required to take the Graduate Record Examination before their admission to the School is completed. In cases where it is not possible to take the Examination before arrival at Duke University and where the transcript of academic work clearly shows that a student is otherwise eligible for admission, the Examination may be taken the first time it is given here after the student's arrival. Students may make their arrangements for taking this Examination directly with the Educational Testing Service, P.O. Box 592, 20 Nassau Street, Princeton, New Jersey. Examinations are conducted several times each year at centers distributed throughout the United States and Canada, and wherever possible students should apply to such a center for the Examination. Applicants in the West Coast region should inquire of the Director of the West Coast Office, Educational Testing Service, Box 2416, Terminal Annex, Los Angeles 54, California.

Applicants are advised to take the advanced test in biology, unless specially qualified in one of the other fields in which an advanced test is given. The record of a student's achievement in the Examination will not only be used in connection with admission to graduate study in forestry but will also be considered in planning his program of study and in case of an application for a scholarship or fellowship.

# Requirements for the Degree of Master of Forestry



THE degree of Master of Forestry (M.F.) is conferred upon students who have satisfactorily completed two years of study in technical forestry and one term of twelve weeks work in plane surveying, forest surveying, and forest mensuration in the Summer Session. In addition to the Summer Session work a total of not less than sixty semester hours credit is required for the M.F. degree, of which at least fifty shall have been obtained in the School of Forestry. Each student, to qualify for the M.F. degree, must have obtained at least one and one half quality points per semester hour of credit under the quality-point system.

Field studies of typical timber-harvesting, manufacturing, and other utilization operations in the South Atlantic Coastal Plain are conducted from the School's field headquarters during a two-week period in the spring semester as part of the work required of students registered in Harvesting and Processing Forest Products (Forestry 212). Other students may be permitted or advised to take this work for which one semester hour of credit may be earned by registering for it in Forestry 212A. A similar period of field work in forest soils, silviculture, forest management, and other subjects in the coastal plain is available to students.

No student may take less than fourteen or more than eighteen hours in any one semester without special permission of the School of Forestry Faculty. The following work will be required of all candidates for the M.F. degree:

## SUMMER SESSION

	S.H.
Plane Surveying (C.E. S110) .....	4
Forest Surveying (F. S150) .....	5
Forest Mensuration (F. S151) .....	4

# FIRST YEAR

## *First Semester*

	S.H.
Dendrology (F. 253) .....	3
Anatomy of Wood (F. 259) .....	3
Forest Soils (F. 261) .....	3
Economics of Forestry (F. 277) .....	3
Electives .....	3

## *Second Semester*

	S.H.
Harvesting and Processing Forest Products (F. 212) .....	4
Forest Pathology (F. 224) .....	3
Sampling Methods (F. 251) .....	3
Silvics (F. 264) .....	3
Electives .....	2

# SECOND YEAR

Two curricula in forestry are available after the common minimum requirements for both have been met. One is in general forestry; the other in forest products. The required work in each curriculum, in addition to that common to both, is:

## GENERAL FORESTRY CURRICULUM

### *First Semester*

	S.H.
Forest Entomology (F. 231) .....	3
Silviculture (F. 265) .....	3
Applied Silviculture (F. 267) .....	1
Forest Protection (F. 273) .....	2
Forest Management (F. 281) .....	3
Thesis research and electives .....	3

### *Second Semester*

	S.H.
Soils and Silviculture Spring Trip (F. 266) .....	1
Forest Valuation (F. 278) .....	3
Management Plans (F. 282) .....	2
Thesis research and electives .....	9

## FOREST PRODUCTS CURRICULUM

### *First Semester*

	S.H.
Seasoning and Preservation (F. 213) .....	3
Silviculture (F. 265) .....	3
Forest Management (F. 281) .....	3
Advanced Forest Utilization (F. 311) .....	3
Thesis research and electives .....	3

### *Second Semester*

	S.H.
Forest Products Entomology (F. 232) .....	3
Properties of Wood (F. 260) .....	3
Industrial Engineering (Eng. 158) ..	3
Thesis research and electives .....	6

Each candidate is required to file in the office of the Dean of the School of Forestry on or before May 15 three copies of a thesis, type-written and bound in accordance with regulations set forth by the Faculty. The thesis shall be based upon an original study made in the field, laboratory, or library.

Work of equivalent grade done in residence at other institutions may, with the approval of the Faculty, be accepted as credit toward the M.F. degree. A minimum of one year's residence is required at Duke University. Students who have had satisfactory undergraduate training in forestry may, with the approval of the Faculty, elect to devote the major portion of their time to research under the supervision of one or more members of the Faculty and prepare a more comprehensive thesis than is required of students entering the School without previous work in forestry. Students in the School of Forestry may take in allied departments of the University as electives certain courses approved by the Faculty.

# Requirements for the Degree of Doctor of Forestry



**THE DEGREE:** The degree of Doctor of Forestry (D.F.) is a professional and research degree, involving both advanced study and research. It is based upon evidence of high attainments in a special branch of forestry knowledge or in the broad field of forestry, including the production of a thesis which is the result of original work and which is a distinct contribution to knowledge in the field of forestry.

A student who plans to enter upon a program of work leading to the degree of Doctor of Forestry should consult or enter into correspondence with the Dean of the School of Forestry. He will then be advised as to the possibility of obtaining the necessary instruction and supervision of work in the fields desired.

**RESIDENCE:** The normal period of resident graduate study, following satisfaction of the general requirements for admission to the Duke School of Forestry, is a minimum of two academic years after the student has obtained the graduate professional degree of Master of Forestry, or its equivalent. At least one of these two years of graduate study must be spent in actual residence at Duke University. With the approval of the Faculty of the School of Forestry work of equal grade done in residence at another college or university, or at a research station or institute not connected with a college or university, may be accepted toward a Doctor of Forestry degree. Only in connection with the preparation of the thesis will work be accepted that has been done elsewhere than in residence at a college, university, research station, or institute. A student whose undergraduate work is insufficient in amount or unsatisfactory in character may be required to spend additional time in preliminary courses essential as a basis for the graduate work he proposes to undertake.

Students whose research is concerned with the study of trees and forest stands in the Duke Forest during the growing season may find it necessary to be at the University during the summer.

Credit for one year of work done in regular terms of the Summer



Session at Duke University may be given with the approval of the School of Forestry Faculty. Graduate work of fragmentary character taken over a long period of years, or work completed many years before the student becomes a candidate for the degree at Duke University, will not be accepted as satisfying the requirements of residence, except in unusual cases.

**APPLICATION FOR CANDIDACY:** No student will be admitted as a candidate for the degree of Doctor of Forestry until he has obtained the professional graduate degree of Master of Forestry or its equivalent, either at Duke University or at a professional school of forestry of recognized standing. A student desiring to become a candidate for the Doctor of Forestry degree is ordinarily required to file with the Dean of the School of Forestry, at the beginning of his graduate work toward this degree, a formal application indicating in which field and under what professor he proposes to carry on research. A committee of the Faculty will then be appointed to supervise the student's work, with the professor in charge of his research as chairman. If and when the committee finds that the preliminary requirements of the major field have been satisfied, the chairman of the committee will report the fact in writing to the Dean of the School of Forestry. In the case of students who come to Duke University for only the last year of graduate work, and in special cases approved by the School of Forestry Faculty, the application for recognition as a candidate for the Doctor of Forestry degree may be filed later than provided above, but not later than October 15 of the academic year in which it is desired that the degree be conferred.

**PROGRAM OF STUDY:** The program of study of a candidate for the Doctor of Forestry degree will be arranged after consultation with the committee provided for in the preceding section and is subject to the approval of the Dean and Faculty of the School of Forestry. The student must select a major field and one or two minor related fields. Both major and minor may be selected in different branches of forestry or the minor may be taken in a related field in some other school or department of Duke University.

**FOREIGN LANGUAGES:** A reading knowledge of two foreign languages is required. One language shall be either French or German, and the other optional to fit the requirements of the student's problem. No student may come up for his preliminary examination before having satisfied the language requirements for the Doctor of Forestry degree. Foreign language examinations are conducted by the appropriate language department or, in special cases, by another qualified member of the Faculty of Duke University.

**PRELIMINARY EXAMINATION:** Toward the end of the first full year of graduate work for the Doctor of Forestry degree (or in

special cases early in the second year), a preliminary examination of each candidate will ordinarily be held covering the general field of his studies. This examination will be conducted by the committee in charge of the student's work and will be written. A student who passes the examination will be recognized as a candidate for the Doctor of Forestry degree. A student's major and minor subjects will ordinarily be included in this preliminary examination.

If a student fails on his first examination, he may make a second attempt after six months upon recommendation of his committee and approval by the Dean of the School of Forestry. Two failures on this examination make the student ineligible to continue work toward the Doctor of Forestry degree at Duke University.

**THESIS:** The thesis for the Doctor of Forestry degree must be a contribution to knowledge. The subject of the thesis must be filed with the Dean of the School of Forestry on or before October 15 of the academic year in which the candidate desires to take the final examination for his degree. The subject must receive the written approval of the professor under whom the thesis is being written and of the Dean of the School of Forestry. The thesis must be completed to the satisfaction of the major professor. Four typewritten copies in approved form must be deposited with the Dean of the School of Forestry on or before April 15 if the student desires to be examined on the thesis in the same academic year. The title page must be approved by the Dean of the School of Forestry. Two of the copies, the original and a carbon copy, are placed in the School of Forestry library, one copy goes to the major adviser, and one is returned to the student.

The candidate's thesis must be published either in its original form or in a modified form approved by the Dean of the School of Forestry and the committee in charge of the candidate's work. In its published form the title page should include this statement: "A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Forestry in the School of Forestry of Duke University."

Before the degree is conferred the candidate must deposit with the Treasurer of the University a special thesis fee of fifty dollars in cash. If the thesis is published in a form satisfactory to the Dean of the School of Forestry and to the professor under whom it is written within a period of three years from the date the degree is granted the fee of fifty dollars is returned. Ten copies of the published thesis must be deposited in the office of the Dean of the School of Forestry as provided by regulations of the Faculty of this school.

**FINAL EXAMINATION:** The final examination will be on the thesis and on related subject matter and will be oral. Approximately one year must elapse between the date of the preliminary examination

and the final examination, except in special cases approved by the School of Forestry Faculty. Two failures on this examination make a student ineligible to continue work toward the Doctor of Forestry degree at Duke University. The second examination may be given only upon the recommendation of the professor in charge of the thesis and the approval of the Dean of the School of Forestry.

**GRADING:** Members of the Faculty are expected to report grades of graduate students to the School of Forestry Office not later than February 15 for the first semester and not later than June 15 for the second semester on the cards provided for that purpose. An average grade of "B" or better will be required for all work, beyond that for the degree of Master of Forestry, that is to be credited toward the Doctor of Forestry degree. A mark of "Incomplete" may be given when a student has failed, for an acceptable reason, to complete some portion of the required work in which his standing is generally satisfactory. Unless a report is made within one year that the work has been satisfactorily completed all credit will be lost.

•

# Forestry in Duke University



## *General Statement*

Forestry in Duke University began early in 1931, when, through placing the Duke Forest under intensive management for forestry purposes, a substantial beginning was made in laying the foundation for educational work and research in forestry.

An academic-forestry curriculum, designed for students intent upon pursuing the study of forestry, particularly as a profession after graduation, was organized in Trinity College of Duke University in 1932. This four-year course of study provides only for instruction in fundamental and auxiliary subjects basic to a proper understanding of the highly specialized work in technical forestry. Duke University offers no professional degree in technical forestry available to undergraduates.

Training in technical forestry leading to the professional degrees, Master of Forestry and Doctor of Forestry, is offered in the School of Forestry, and is open to graduates of the academic-forestry curriculum in Trinity College and to graduates of recognized scientific schools or colleges, universities, and professional schools of forestry.

Duke University is also prepared to offer, through the Graduate School of Arts and Sciences, graduate work in the more scientific aspects of forestry leading to the Master of Arts and Doctor of Philosophy degrees. This work is available to graduates of schools of forestry of recognized standing, and to college or university graduates holding the Bachelor's degree with their major work in appropriate scientific subjects. Undergraduate subjects which the college student, who does not have forestry training but who is contemplating work toward either degree in forestry, should take in preparation for this work may be illustrated as follows: At least two full years in botany, including general morphology or anatomy, the taxonomy, physiology, and ecology of plants; at least one course in zoology or general biology; courses in chemistry, physics, geology, economics, mathematics; and at least two years of French or German.

Several staff members of the Southeastern Forest Experiment Station are engaged in co-operative research projects in the Duke Forest. Specialists from this station and other prominent members of the U. S. Forest Service and representatives of forest and wood-using industries give occasional scheduled lectures at the School.

# Courses and Subjects of Instruction



With the exception of the Summer Session courses, odd-numbered courses are offered in the autumn semester, and even-numbered courses are offered in the spring semester.

## IN THE SUMMER SESSION

C.E. S110. PLANE SURVEYING.—4 s.h. MR. BROWN

S150. FOREST SURVEYING.—Prerequisites: Civil Engineering S110, plane surveying, or equivalent. 5 s.h. ASSISTANT PROFESSOR RUDOLPH

S151. FOREST MENSURATION.—4 s.h. PROFESSOR SCHUMACHER

## FOR SENIORS AND GRADUATES

212. HARVESTING AND PROCESSING FOREST PRODUCTS.—4 s.h. PROFESSOR WACKERMAN

213. SEASONING AND PRESERVATION OF WOOD.—3 s.h. PROFESSOR WACKERMAN

214. MARKETING FOREST PRODUCTS.—Prerequisites: Forestry 212 or equivalent. 3 s.h. PROFESSOR WACKERMAN

224. FOREST PATHOLOGY.—Prerequisites: Botany 1 and 2, and Forestry 253, or equivalents. 3 or 4 s.h. PROFESSOR WOLF

231. FOREST ENTOMOLOGY.—3 s.h. ASSOCIATE PROFESSOR ANDERSON

232. FOREST PRODUCTS ENTOMOLOGY.—3 s.h. ASSOCIATE PROFESSOR ANDERSON

236. FOREST GAME MANAGEMENT.—3 s.h. ASSOCIATE PROFESSOR ANDERSON

251. SAMPLING METHODS IN FORESTRY.—Prerequisite: Forestry S151. 3 s.h. PROFESSOR SCHUMACHER

252. FOREST MENSURATION.—Prerequisite: Forestry 251. 3 s.h. PROFESSOR SCHUMACHER

253. DENDROLOGY.—Prerequisite: one year of botany. 3 s.h. PROFESSOR HARRAR

255. BONDING OF WOOD.—Prerequisite: Forestry 260 or equivalent. 3 s.h. PROFESSOR HARRAR

257. DESIGN OF FORESTRY EXPERIMENTS AND ANALYSIS OF DATA.—5 s.h. PROFESSOR SCHUMACHER

259. WOOD ANATOMY.—Prerequisite: one year of botany. 3 s.h. PROFESSOR HARRAR

260. PROPERTIES OF WOOD.—Prerequisites: Forestry 259, one year of college chemistry; one course in college physics. 3 s.h. PROFESSOR HARRAR



261. FOREST SOILS.—Prerequisites: Chemistry 1 and 2, and Physics 1, or equivalent; physical geology, mineralogy, petrology, and analytical chemistry are also desirable. 3 s.h. PROFESSOR COILE

264. SILVICS.—Desirable prerequisites: plant physiology, plant ecology, and Forestry 253 and 261, or equivalents. 3 s.h. PROFESSOR KORSTIAN

265. THEORY AND PRACTICE OF SILVICULTURE.—Prerequisite: Forestry 263 or equivalent. 3 s.h. PROFESSOR KORSTIAN

266. SOILS AND SILVICULTURE SPRING TRIP.—Prerequisite: Forestry 265 or equivalent. 1 s.h. PROFESSOR COILE

267. APPLIED SILVICULTURE.—Prerequisite: Forestry 265 or equivalent. 1 s.h. PROFESSOR KORSTIAN

268. FOREST SEEDING AND PLANTING.—2 s.h. PROFESSOR KORSTIAN

273. FOREST PROTECTION.—2 s.h. ASSISTANT PROFESSOR RUDOLPH

275. FORESTRY POLICY.—2 s.h. MR. SULLIVAN

277. ECONOMICS OF FORESTRY.—Prerequisite: at least one course in the principles of economics. 3 s.h. MR. SULLIVAN

278. FOREST VALUATION.—Prerequisites: Forestry 277 and 280, or equivalents. Not open to students who have previously had a course in forest valuation. 3 s.h. MR. SULLIVAN

279. ECONOMIC ANALYSIS IN FORESTRY.—3 s.h. MR. SULLIVAN

281. FOREST MANAGEMENT.—Prerequisite: Forestry S150, S151 or equivalent. 3 s.h. ASSISTANT PROFESSOR RUDOLPH

282. MANAGEMENT PLANS.—Prerequisites: Forestry 265 and 280 or equivalents. 2 s.h. ASSISTANT PROFESSOR RUDOLPH

212A TO 282A. SPECIAL STUDIES IN FORESTRY.—Credits and hours to be arranged. THE STAFF

#### FOR GRADUATES

301-302. ADVANCED STUDIES IN FORESTRY.—Credits to be arranged.

A. SILVICS.—Prerequisites: Forestry 253, 261, and 263, or equivalents. PROFESSOR KORSTIAN

B. FOREST SOILS.—Prerequisite: Forestry 261 or equivalent. PROFESSOR COILE

C. SILVICULTURE.—Prerequisites: Forestry 265 and 266 or equivalent. PROFESSOR KORSTIAN

D. FOREST MANAGEMENT.—Prerequisite: Forestry 280 or equivalent. ASSISTANT PROFESSOR RUDOLPH

E. FOREST ECONOMICS.—Prerequisite: Forestry 277 or 279 or equivalent. MR. SULLIVAN

F. PROPERTIES OF WOOD.—Prerequisites: Forestry 259 and 260, or equivalents. PROFESSOR HARRAR

G. FOREST MENSURATION.—Prerequisite: Forestry 252 or equivalent. PROFESSOR SCHUMACHER

H. FOREST ENTOMOLOGY.—Prerequisites: Forestry 231, 232 or equivalent. PROFESSOR BEAL

I. FOREST UTILIZATION.—Prerequisite: Forestry 212 or equivalent. PROFESSOR WACKERMAN

J. DENDROLOGY.—Prerequisite: Forestry 253 or equivalent. PROFESSOR HARRAR

311. ADVANCED FOREST UTILIZATION.—Prerequisite: Forestry 212 or equivalent. 3 s.h. PROFESSOR WACKERMAN

320. SEMINAR IN SILVICULTURE.—Prerequisite: At least one course in silviculture. 3 s.h. PROFESSOR KORSTIAN

322. SOIL CLASSIFICATION AND MAPPING.—Prerequisite: Forestry 261. 2 s.h. PROFESSOR COILE

323-324. ADVANCED FOREST PATHOLOGY.—Prerequisites: plant physiology and forest pathology. Credits to be arranged. PROFESSOR WOLF

351-352. ADVANCED PHYSIOLOGY OF FOREST TREES.—Prerequisites: plant physiology and plant ecology or silvics. Credits to be arranged. PROFESSOR KRAMER

354. FOREST SOIL FERTILITY.—Prerequisites: Forestry 251 and 261, plant physiology, bacteriology and analytical chemistry. 3 s.h. PROFESSOR COILE

356. COMPARATIVE FOREST VALUATION.—Prerequisites: Forestry 277, 278, or 279, or equivalent; courses in economic theory are desirable. 2 s.h. MR. SULLIVAN

357-358. RESEARCH IN FORESTRY.—Credits to be arranged. THE STAFF



## THE SUMMER SESSION

First term begins June 14, 1951

Second term begins July 24, 1951

# Administrative Officers of the Summer Session



ARTHUR HOLLIS EDENS, B.Ph., A.M., M.P.A., Ph.D., LL.D.  
*President of Duke University*

PAUL MAGNUS GROSS, B.S., A.M., Ph.D.  
*Vice-President in the Educational Division*

CHARLES EDWARD JORDAN, A.B., LL.D.  
*Vice-President in the Division of Public Relations and  
Secretary of the University*

HERBERT JAMES HERRING, A.B., A.M., LL.D.  
*Vice-President in the Division of Student Life and  
Dean of Trinity College*

ALFRED SMITH BROWER, A.B.  
*Business Manager and Comptroller*

ALAN KREBS MANCHESTER, A.B., A.M., Ph.D.  
*Dean of Undergraduate Studies*

PAUL HIBBERT CLYDE, A.B., A.M., Ph.D.  
*Director of the Summer Session*

WILLIAM THOMAS LAPRADE, A.B., Ph.D.  
*Member of the University Committee on the Summer Session*

JOSEPH CLARK ROBERT, A.B., A.M., Ph.D.  
*Associate Dean of the Graduate School*

JOHN WINDER CARR, JR., A.B., A.M., Ph.D.  
*Assistant Director of the Summer Session*

MARY GRACE WILSON, A.B., A.M.  
*Dean of Residence, the Woman's College*

THIELMA ALBRIGHT, A.B., A.M.  
*Social Director, First Term*

EVELYN BARNES, B.S.  
*Social Director, Second Term*



# The Summer Session Faculty



- ADAMS, DONALD KEITH, A.B., M.A., Ph.D.; *Psychology* (Duke University).
- ALLENSON, DOUGLAS R., A.B.; *Chemistry* (Duke University).
- AMOR Y VALQUEZ, JOSE, DR. EN LEYES; *Spanish* (Brown University).
- ANDERSON, LEWIS EDWARD, B.S., A.M., Ph.D.; *Botany* (Duke University).
- ARCHIE, WILLIAM COUNCIL, A.B., A.M., Ph.D.; *Romance Languages* (Duke University).
- AYCOCK, THOMAS MALCOLM, B.S., M.A.; *Physical Education* (Duke University).
- BAUM, PAULL FRANKLIN, A.B., A.M., Ph.D.; *English* (Duke University).
- BEACH, WALDO, A.B., B.D., Ph.D.; *Christian Ethics* (Duke University).
- BERRY, EDWARD WILLARD, A.B., Ph.D.; *Geology* (Duke University).
- BLACK, MARTIN LEE, JR., A.B., M.B.A., C.P.A.; *Accounting* (Duke University).
- BLACKBURN, WILLIAM MAXWELL, A.B., M.A., Ph.D.; *English* (Duke University).
- BLOMQUIST, HUGO LEANDER, B.S., Ph.D.; *Botany* (Duke University).
- BOLMEIER, EDWARD CLAUDE, B.S., A.M., Ph.D.; *Education* (Duke University).
- BOOKHOUT, CAZLYN GREEN, A.B., A.M., Ph.D.; *Zoology* (Duke University).
- BOWMAN, FRANCIS EZRA, A.B., M.A., Ph.D.; *English* (Duke University).
- BRADSHAW, CHARLES KILGO, A.B., M.A., Ph.D.; *Chemistry* (Duke University).
- BRASWELL, WILLIAM, M.A., Ph.D.; *English* (Purdue University).
- BROWN, CHANDLER WILCOX, B.S. in C.E.; *Civil Engineering* (Duke University).
- CANNON, JAMES, III, A.B., A.M., Th.B., Th.M., D.D.; *History of Religion and Missions* (Duke University).
- CARLITZ, LEONARD, A.B., A.M., Ph.D.; *Mathematics* (Duke University).
- CARPENTER, DAVID WILLIAMS, A.B., A.M., Ph.D.; *Physics* (Duke University).
- CARR, JOHN WINDER, JR., A.B., A.M., Ph.D.; *Education* (Duke University).
- CARROLL, EBER MALCOLM, A.B., A.M., Ph.D.; *History* (Duke University).
- CHILDS, BENJAMIN GUY, B.A., M.A.; *Education* (Duke University).
- COILE, THEODORE STANLEY, B.S.F., M.F., Ph.D.; *Forest Soils* (Duke University).
- COOK, DANIEL, A.B., M.A.; *English* (Duke University).
- CORDLE, THOMAS HOWARD, A.B., A.M.; *Romance Languages* (Duke University).
- CRAWLEY, MILDRED, R.N., B.S.; *Nursing Arts* (Duke University).
- DAVIES, WILLIAM DAVID, B.A., M.A., B.D., D.D.; *Biblical Theology* (Duke University).
- DAVIS, GIFFORD, A.B., A.M., Ph.D.; *Romance Languages* (Duke University).
- DICKEY, DALLAS, M.A., Ph.D.; *English* (University of Florida).
- DICKENS, ROBERT, B.S., M.S.; *Economics* (Duke University).

- DOW, NEAL, A.B., M.A., Ph.D.; *Romance Languages* (Duke University).
- DRESSEL, FRANCIS GEORGE, B.S., M.S., Ph.D.; *Mathematics* (Duke University).
- DUNHAM, BRADFORD, A.B., Ph.D.; *Philosophy* (Duke University).
- EASLEY, HOWARD, A.B., M.A., Ph.D.; *Education* (Duke University).
- ECKARDT, ARTHUR ROY, B.A., B.D., Ph.D.; *Religion* (Duke University).
- ELLIOTT, WILLIAM WHITFIELD, B.A., M.A., Ph.D.; *Mathematics* (Duke University).
- FEIN, JOHN MORTON, A.B., A.M., Ph.D.; *Romance Languages* (Duke University).
- GARMIEZY, NORMAN, B.A., M.A., Ph.D.; *Psychology* (Duke University).
- GERGEN, JOHN JAY, A.B., A.M., Ph.D.; *Mathematics* (Duke University).
- GILBERT, ALLAN H., A.B., A.M., Ph.D.; *English* (Duke University).
- GRAY, IRVING EMERY, B.S., M.S., Ph.D.; *Zoology* (Duke University).
- HAMILTON, WILLIAM BASKERVILLE, A.B., A.M., Ph.D.; *History* (Duke University).
- HANNA, FRANK, A., B.A., Ph.M., Ph.D.; *Economics* (Duke University).
- HART, HORNE LL NORRIS, A.B., M.A., Ph.D.; *Sociology* (Duke University).
- HAUPT, GEORGE W., B.S., M.A., Ph.D.; *Education* (Glassboro State Teachers College).
- HICKSON, ARTHUR OWEN, A.B., A.M., Ph.D.; *Mathematics* (Duke University).
- HIGHSMITH, JOHN HENRY, A.B., A.M., LL.D., D.Ed.; *Education* (N. C. State Department of Public Instruction).
- HILLMAN, JAMES ELGAN, B.S., A.M., Ph.D.; *Education* (N. C. State Department of Public Instruction).
- HOBBS, MARCUS EDWIN, A.B., A.M., Ph.D.; *Chemistry* (Duke University).
- HORN, EDWARD CHARLES, B.S., A.M., Ph.D.; *Zoology* (Duke University).
- HUNTER, WANDA SANBORN, MRS., A.B., M.S., Ph.D.; *Zoology* (Duke University).
- HYLDBURG, CARL A., JR., A.B., LL.B.; *Economics* (Duke University).
- INGLES, THELMA, R.N., B.A., M.A.; *Nursing Education* (Duke University).
- JOERG, FREDERICK CHARLES, B.S., M.B.A.; *Economics* (Duke University).
- LANDON, CHARLES EARL, A.B., A.M., Ph.D.; *Economics* (Duke University).
- LANNING, JOHN TATE, A.B., A.M., Ph.D.; *History* (Duke University).
- LEMERT, BEN FRANKLIN, B.Sc. in Bus. Admin., M.A., Ph.D.; *Economic Geography* (Duke University).
- MCCORMIC, MARY, A.B., M.A.; *Health Education* (Duke University).
- MANCHESTER, ALAN KREBS, A.B., A.M., Ph.D.; *History* (Duke University).
- MANN, EVERETTE JAMES, A.B., M.B.A., C.P.A.; *Economics* (Duke University).
- MASSEY, LUCY, R.N., B.A., M.A.; *Public Health Nursing* (Duke University).
- MATHEWSON, FRANKLIN T., A.B., M.A., Ph.D.; *Education* (Supervisor of Audio-Visual Education, Public Schools, White Plains, N. Y.).
- MAXWELL, WILLIAM CARY, A.B., A.M., Ph.D.; *German* (Duke University).
- MEYER, GEORGE W., M.A., Ph.D.; *English* (Newcomb College, Tulane University).
- MONTFORT, ROBERT JOHN, B.A.; *Physical Education* (Duke University).
- MOSER, LOUISE, R.N., A.B., M.N.; *Nursing Education* (Duke University).
- OSTERMAN, MARIE, R.N., B.S., M.A.; *Nursing Education* (Duke University).

- OSTWALT, JAY HAROLD, A.B., A.M.; *Education* (Davidson College).
- PERRY, EDMUND FRANKLIN, A.B., B.D., Ph.D.; *Religion* (Duke University).
- PORTUONDO, JOSE ANTONIO, Bach. en C. y L., Dr. en F. y L.; *Spanish* (Columbia University).
- PREDMORE, RICHARD LIONEL, B.A., M.A., D.M.L.; *Spanish* (Duke University).
- RANKIN, ROBERT STANLEY, A.B., A.M., Ph.D.; *Political Science* (Duke University).
- RANKIN, WILLIAM WALTER, JR., B.E., M.A.; *Mathematics* (Duke University).
- REARDON, KENNETH JAMES, A.B., A.M.; *English* (Duke University).
- REED, FREDERICK JEROME, M.E., M.S.; *Mechanical Engineering* (Duke University).
- REID, MALCOLM, B.S., M.S., Ph.D.; *Zoology* (Monmouth College).
- RICHARDS, CLAUDE HENRY, JR., A.B., A.M., Ph.D.; *Political Science* (Duke University).
- ROBERTS, HENRY STOUTTE, JR., A.B., Ph.D. *Zoology* (Duke University).
- RODNICK, ELIOT H., B.A., Ph.D.; *Psychology* (Duke University).
- ROPP, THEODORE, A.B., A.M., Ph.D.; *History* (Duke University).
- ROSE, JESSE LEE, A.B., M.A., Ph.D.; *Latin and Greek* (Duke University).
- RUDISILL, MABEL, A.B., M.A., Ph.D.; *Education* (Duke University).
- RUDOLPH, VICTOR JOHN, B.S., M.F., D.F.; *Forest Management* (Duke University).
- SALES, REAMES HAWTHORNE, A.B., B.D.; *Religion* (Duke University).
- SANDERS, C. RICHARD, B.Ph., M.A., Ph.D.; *English* (Duke University).
- SAYLOR, JOHN HENRY, A.B., A.M., Ph.D.; *Chemistry* (Duke University).
- SCHAFER, THOMAS ANTON, A.B., B.D.; *Historical Theology* (Duke University).
- SCHETTLER, CLARENCE HENRY, A.B., A.M., Ph.D.; *Sociology* (Duke University).
- SCHUMACHER, FRANCIS X., B.S.; *Forestry* (Duke University).
- SHIELDS, JOHN HERMAN, A.B., A.M.; *Accounting* (Duke University).
- SIMPSON, WILLIAM HAYS, A.B., A.M., Ph.D.; *Political Science* (Duke University).
- SLAY, JAMES MATTHEW, A.B., A.M.; *Education* (Duke University).
- SMITH, DOROTHY, R.N., B.S., M.Ed.; *Nursing Education* (Duke University).
- SMITH, HILRIE SHELTON, A.B., Ph.D., D.D., Litt.D.; *American Religious Thought* (Duke University).
- SMITH, ROBERT SIDNEY, A.B., A.M., Ph.D.; *Economics* (Duke University).
- SPENGLER, JOSEPH JOHN, A.B., M.A., Ph.D.; *Economics* (Duke University).
- STEWART, RANDALL, M.A., Ph.D.; *English* (Brown University).
- STINESPRING, WILLIAM FRANKLIN, B.A., M.A., Ph.D.; *Old Testament* (Duke University).
- STRIPLING, HARRIETTE, A.B., A.M., Docteur de l'universite; *Romance Languages* (Duke University).
- STROBEL, HOWARD A., B.S., Ph.D.; *Chemistry* (Duke University).
- STUMPF, WIPPERT A., B.S., A.M., Ph.D.; *Education* (Duke University).
- SYDNOR, CHARLES SACKETT, A.B., Ph.D., Litt.D.; *History* (Duke University).
- THOMAS, JOSEPH MILLER, A.B., Ph.D.; *Mathematics* (Duke University).
- THOMPSON, EDGAR TRISTRAM, A.B., A.M., Ph.D.; *Sociology* (Duke University).

- TORRE, ELIAS, Bach. de Instituto, Bach. Universitario, M.A.; *Spanish* (Rutgers University).
- TRAVIS, MARTIN BICE, JR., A.B., M.A., Ph.D.; *Political Science* (Duke University).
- TRUESDALE, JAMES N., A.B., A.M., Ph.D.; *Greek* (Duke University).
- WATSON, RICHARD L., JR., A.B., Ph.D.; *History* (Duke University).
- WEITZ, HENRY, A.B., Ed.M., Ed.D.; *Education* (Duke University).
- WELSH, PAUL, B.S., Ph.D.; *Philosophy* (Duke University).
- WHARTON, GEORGE WILLARD, JR., B.S., Ph.D.; *Zoology* (Duke University).
- WHITE, MARIE ANNE, MRS., A.B., A.M.; *English* (Duke University).
- WHITRIDGE, EUGENIA R., MRS., A.B., A.M., Ph.D.; *Sociology* (Duke University).
- WILDER, PELHAM, JR., A.B., M.A., Ph.D.; *Chemistry* (Duke University).
- WILLIAMS, JAMES WESLEY, A.B., B.S. in C.E., M.S.; *Civil Engineering* (Duke University).
- WILSON, FREDERICK ELIPHAZ, A.B., A.M.; *German* (Duke University).
- WOODY, ROBERT HILLIARD, Ph.B., A.M., Ph.D.; *History* (Duke University).
- ZENER, KARL EDWARD, Ph.B., A.M., Ph.D.; *Psychology* (Duke University).
- ZUKOWSKI, HALINE, R.N., B.S., M.L.; *Nursing Education* (Duke University).

# Admission



THE general requirement for admission to the Summer Session is graduation from an accredited secondary school, or its equivalent. Admission to the Summer Session does not of itself imply that a student is qualified to enroll in a particular course. Admission to specific courses is governed by the student's academic status (freshman, sophomore, junior, senior, graduate, special or unclassified, etc.) and by the prerequisites of the course in question.

## *Students in Residence at Duke University during the Spring Semester 1951*

Duke students in residence during the Spring Semester should enroll in their respective colleges during the advance enrollment period.

## *Students Not in Residence at Duke during the Spring Semester 1951*

(A) UNDERGRADUATES: New students seeking to enter Duke University as freshmen or as undergraduates with advanced standing, and undergraduates who wish to re-enter the University should write the Admissions Office. Men will address their application to the Director of Admissions, Trinity College and the College of Engineering; women will address their application to the Director of Admissions, the Woman's College.

Undergraduates, both men and women, enrolled in other universities and colleges who desire to earn in the Duke University Summer Session credits which are to be transferred to their own institutions, should apply directly to the Director, the Summer Session, Duke University.

Entrance requirements for applicants seeking to enroll as candidates for the Bachelor's degree are given in full in the *Bulletin of Undergraduate Instruction*.

(B) GRADUATES: Students with graduate standing and teachers in service with or without the Bachelor's degree who wish to earn



credits toward the renewal or the advancement of their certificate and who do not wish to become candidates for a degree at Duke University should apply to the Director of the Summer Session.

Graduate students who are seeking admission to the Graduate School at Duke University *must also file* Graduate School application forms which may be secured by writing to the Dean of the Graduate School, Duke University, Durham, North Carolina

### *Admission to Degree Candidacy*

Credits earned during the Summer Session may be applied toward the requirements of a degree in the case of students who have been admitted to degree candidacy by the proper University authority.

Rejection by one of the University's colleges or by the Graduate School of a student's application for admission to that school does not preclude admission to the Summer Session as a special or unclassified student.

### *Admission to Summer Session Classes*

All graduate students who have been admitted to the Graduate School of Arts and Sciences for summer work must also apply to and register with the Summer Session office. Those, however, who are in residence at Duke during the spring semester 1951 should not file the Summer Session application but should enroll in the Graduate School advance enrollment.

### *Kinds of Course Enrollment*

Summer Session courses may be taken for "Credit" or for "Non-Credit," or may be "Audited." A student's program may be exclusively in one of these categories, or may combine any two of them or all three. Students taking a full or partial program for Credit may enroll as Auditors or Non-Credit students in any number of additional courses.

DEFINITION OF THE TERM "CREDIT": A student who wishes a grade in a particular course must enroll in that course "for Credit." The Summer Session term "Credit" does not mean degree credit at Duke unless the student has been admitted as a degree candidate by one of the colleges or schools of the University. G. I. Bill benefits are available only to those veterans who enroll "for Credit."

Courses numbered 1-49 are primarily for freshmen, or freshmen and sophomores. Courses numbered 50-99 are ordinarily for sophomores, or sophomores and juniors. Courses numbered 100-199 are

designed for juniors and seniors. Courses numbered 200-299 are planned for seniors and graduates. Courses numbered from 300 up admit graduate students only. Courses numbered from 200 up are limited in enrollment.

**CREDIT:** A student taking a course "for Credit" is expected to do all the work required and to take the final examination. He will receive a grade representing the quality of the work done.

<i>Undergraduate Grades</i>	<i>Graduate Grades</i>
A—excellent	E—exceptional
B—good	G—good
C—average	S—satisfactory
D—poor but passing	F—failure
F—failure	

**LENGTH OF COURSES AND CREDIT ALLOWED:** The Summer Session courses are of the same quality and credit value as courses in the regular semester. Credit earned in the Summer Session is in terms of semester hours. The majority of Summer Session courses carry 3 semester hours credit and require six weeks in residence. A limited number of basic courses in the sciences run for four weeks (Chemistry, Geology, Zoology) or five weeks (Physics). Introductory foreign language courses are given intensively on a three-week basis, as are a limited number of courses for teachers.

**THE NORMAL COURSE PROGRAM:** The normal and maximum program for a six-week term is 6 semester hours. The 4 and the 5 semester hour courses in the sciences run for four and five weeks respectively and constitute a full course program.

**APPROVAL OF CREDITS FOR TRANSFER:** A student who desires to receive credit for Summer Session courses toward a degree at a university or college other than Duke must in his own interest obtain advance approval from the registrar or dean of that institution. This is done on the Course Approval form which will be supplied on request by the Director of the Summer Session.

Professional credits towards teachers' certificates are granted by the various state boards of education, each in accordance with its own carefully planned rules. Teachers in service, before enrolling for certification credit, should consult the rules laid down by their State Board of Education. If necessary, they should send to their State Board of Education a list of the courses in which they plan to enroll and inquire whether these will be acceptable for certification credit.

**NON-CREDIT:** "Non-Credit" enrollment is available to the student who wishes the privilege of participating in class discussions, exercises, and laboratory assignments but does not wish to take the examinations either mid-term or final. A "Non-Credit" student may

do as much of the work of the course as he desires, but he may not take the final examination and he will not receive a grade. Full fees are required in "Non-Credit" enrollment.

**AUDITOR:** An auditor is entitled to listen to lectures and class discussions, but may not participate in discussions or take examinations. Students may not enroll as auditors in laboratory courses. A student carrying a full program for Credit may be given permission to audit as many courses as he desires without additional fees. Students carrying less than a full program for Credit may secure permission to audit but are required to pay the auditing fee.

### *Fees and Living Expenses*

#### The University Fee:

Covering registration, tuition, and medical care.....	\$12.00 per semester hour
Teachers in full-time service in Elementary and Secondary Schools .....	6.00 per semester hour
Nurses enrolled in Nursing Education courses.....	6.00 per semester hour

#### Laboratory Fees: (These where applicable are in addition to the University Fee.)

The School of Spanish Studies.....	\$15.00
Marine Laboratory .....	10.00

#### Fees for Special Conferences and Institutes:

Institute for Teachers of Mathematics.....	\$12.50
Science Teachers Laboratory Conference.....	6.00
Nursing Education Workshop .....	10.00

#### Master's Degree Summer Session Fee:

Candidates for the Master's degree who do 12 to 15 hours of the program in Summer Sessions and who complete the thesis and/or take the final oral examination in the Summer Session pay a degree fee of.....	\$12.50
When more than 15 hours is taken in Summer Sessions and/or oral examination is taken in the Summer Session, the degree fee is.....	\$25.00

#### Auditing Fees:

1. Students registered for a full course program may audit non-laboratory courses (with the permission of the Director) at no extra charge.
2. Students carrying less than a full course program may be granted permission to audit a course or courses on payment of half the University fee per semester hour audited.....\$ 6.00 per s.h.

#### Late Registration Fee:

Students who fail to register prior to the first class day of a given course will pay an extra fee of.....	\$ 5.00
---	---------

#### Fee for Course Changes:

Course changes after registration day other than those required by the University will be made only on payment of an extra fee of.....	\$ 1.00
---	---------

#### Refund of Fees:

- a. When applications for withdrawal are received by the Director of the Summer Session before the close of registration on registration day, full fees will be refunded.
- b. When applications for withdrawal are received by the Director of the Summer Session during the first four class days of a given term all but 20 per cent of the fees will be refunded.
- c. When applications for withdrawal are received by the Director of the Summer Session after the fourth class day there will be no refund of fees.

# Registration



ALL Summer Session students, whether or not pre-enrolled, whose classes begin on June 13 (first term) are required to present themselves at general registration in the large gymnasium, June 12, to complete their registration: to have their course programs confirmed, to effect course changes if necessary, to pay their fees if not paid in advance, to receive class enrollment cards, to fill out the Summer Session questionnaire, and to receive recreation cards.

Students whose first classes meet on June 18 (Physics S51), or on June 25 (Chemistry S1, S61, S151, Geology S51 and Zoology S1, S53) are not required to be present at general registration, June 12. They must, however, complete their registration in the Summer Session Office, 104 Page, *before* the day on which their classes begin.

# Resources of the University



## *Libraries and Research Facilities*

Summer Session students have access to the General Library and the various school and departmental libraries with their large and significant special collections. Science laboratories, equipped for general and special research, are available. For a more detailed description see the *Bulletin of the Summer Session*.

## *Special Conferences and Institutes*

The Summer Session sponsors special conferences and institutes such as the School of Spanish Studies, the Institute for Teachers of Mathematics, the Science Teachers Laboratory Conference, the Nursing Education Workshop, the Conference of the North Carolina Council for the Social Studies, the Institute of the North Carolina English Teachers Association, and the School for Accepted Supply Pastors. For further information see the *Bulletin of the Summer Session*.

## *Post-Doctoral Research*

Scholars engaged in post-doctoral research find it advantageous and sometimes essential to use in summer the resources of the Duke University libraries. The University welcomes these visitors, and makes available to them the living accommodations of the dormitories and the dining halls during the Summer Session, June 12 to August 31. Application for these post-doctoral research privileges must be made in advance by letter to the Director of the Summer Session, giving the applicant's present position, the specific field of his research interest, and the dates during which he desires to be in residence. Approved applicants will be accepted subject to the availability of library and of dormitory space.



# Graduate Study in the Summer Session



A STUDENT who wishes to work toward the A.M., M.Ed., Ph.D., or Ed.D. degree must apply for admission to the Graduate School of Arts and Sciences. Only those students who have been officially admitted to the Graduate School will be required to register in the Graduate School. It is quite appropriate for a student who holds a bachelor's degree and who desires only professional credit to apply directly to the Director of the Summer Session for admission as a special or unclassified student. It should be understood, however, that the credit earned while the student is so listed is not credit toward an advanced degree in the Graduate School of Arts and Sciences. Students who look forward to taking an advanced degree by work in the Summer Sessions should make sure that all of their documents necessary for admission to the Graduate School (see below) have been forwarded to the Dean of that School.

To make formal application the student should address the Dean of the Graduate School, Duke University, requesting official application blanks. These should be filled out fully, in duplicate, and returned at the earliest moment. The other documents needed to complete the application, namely, transcripts, letters of recommendation, and Graduate Record Examination scores, must be forwarded directly from the institutions or individuals to the Dean of the Graduate School. In no case will such documents be accepted directly from the student.

In order that application to the Graduate School for summer work be given due consideration, the student should submit all of his documents to the Dean of the Graduate School by June 1 before the first term, and by July 10 before the second term of the Summer Session. It would be difficult to give applications received after these dates the same attention given those received earlier. After the application is accepted and approved, the student will receive a letter of admission to the Graduate School.

## *Registration of Graduate Students*

Students who have received a letter of admission to the Graduate School from the Director of Admissions of the Graduate School should

present themselves for registration at the official registration period, June 12 for the first term, and July 21 for the second term. The student should remember that his registration with the Summer Session is not equivalent to registration in the Graduate School, and he should be sure to present himself for official registration in the Graduate School, so that his course work can be accredited to his program leading to a degree. Students who have not been granted admission to the Graduate School, of course, do not register in the Graduate School.

### *Special Requirements for Students Who Intend to Earn Degrees Solely by Summer Work*

Graduate students who expect to earn either their A.M. or M.Ed. degree entirely in Summer Sessions must meet a minimum residence requirement of 33 weeks. The same requirement of 33 weeks is held for those who do not complete their entire requirements in summers, but who present more than 15 semester hours earned in the Summer Session toward either the A.M. or the M.Ed. degree.

**STUDY FOR THE PH.D. DEGREE:** Students who are interested in working toward a Ph.D. degree should consult the detailed requirements as outlined in the *Bulletin* of the Duke University Graduate School of Arts and Sciences. Of the three years required as minimum residence, not more than one year can be earned in Summer Sessions. Full-time enrollment for one six-week term is counted as one-fifth of an academic year.

### *Requirements for the Master of Arts Degree*

**LANGUAGE REQUIREMENTS:** The candidate for the A.M. degree must have a reading knowledge of at least one foreign language. (The several departments reserve the right to specify which foreign languages are acceptable.) Evidence of such knowledge may be furnished in either of two ways: (1) by successfully passing an examination, officially conducted by the appropriate foreign language department at Duke University, or (2) by a transcript showing the completion of the third college year of one language, or the second college year of each of two acceptable foreign languages.

If the student must take the examination to satisfy this requirement, he may request—should he feel well qualified—the language examination required of candidates for the Ph.D. degree. By passing this examination, he may satisfy the requirements for both degrees at one time.

**MAJOR SUBJECT:** As a prerequisite to graduate study in his major subject, the student must have completed a *minimum* of 12

semester hours of approved college courses in that subject, and 12 additional semester hours in that subject or in related work. Since some departments require more than 12 semester hours, the student should read carefully the special requirements listed by his major department, which are included as headnotes to the course offerings in the *Bulletin* of the Graduate School.

In his graduate work, the student, in order to complete the course requirements for the A.M. degree, must present acceptable marks for 27 semester hours of graduate courses. In addition to these he must present a thesis, which carries a credit of 6 semester hours. Thus, his earned credit for the degree totals 33 semester hours.

**MINOR SUBJECT:** Beyond the work for his major, the student must take a minimum of 6 semester hours in a minor department, the department of the minor to be approved by his major department. The remaining 6 semester hours of the necessary 27 may be taken in either of these departments, or in another approved by the major department and by the Graduate School Council.

**TRANSFER OF CREDITS:** Under certain circumstances a maximum credit of 6 semester hours may be allowed for graduate courses completed elsewhere. The acceptance of credit up to this amount, however, will not reduce the minimum period of full-time registered residence at Duke University. In no case will credit be allowed for extension or correspondence courses.

With the approval both of the student's major department and the Dean of the Graduate School, a student who is granted such transfer credit may be permitted to register for as much as 12 semester hours of thesis research instead of the usual 6 semester hours. Or he may be permitted to fill out his schedule with as much as 6 semester hours of further undergraduate training or 6 semester hours of required language courses on the undergraduate level.

**CANDIDACY FOR THE MASTER OF ARTS DEGREE:** After a student who has been officially admitted to the Graduate School has successfully completed 12 semester hours of graduate course work, he may apply for candidacy for the A.M. degree. Two conditions must have been met: (1) he must have passed all of his course work with at least 3 semester hours of "G" (good) grade or better; and (2) he must present to the Dean of the Graduate School an endorsement of his candidacy by the Director of Graduate Studies in his major department.

**TIME LIMITS FOR COMPLETION OF THE MASTER OF ARTS DEGREE:** The candidate for the A.M. degree must complete all of his course requirements and the thesis within a period of six calendar years from the date of his initial registration. Credits earned over a longer period of time cannot be credited toward a degree.

The student who expects to complete all requirements for the A.M. degree in the Summer Sessions must file with the Dean of the Graduate School, during the first week of the term when he expects to complete the work, a statement of his intention.

**THE THESIS FOR THE MASTER OF ARTS DEGREE:** The thesis for the A.M. degree should demonstrate the student's ability to collect, arrange, interpret, or report pertinent material on his special research problem. Although a publishable document is not required, the thesis must be written in a literate style, and should exhibit the student's competence in scholarly methods and procedures.

**REGULATIONS AND PROCEDURES:** On or before July 1 of the summer in which it is expected the degree will be conferred, the student must file with the Dean of the Graduate School, on the official blank provided for that purpose, the final title of the thesis.

Four bound, typewritten copies of the thesis must be submitted, in approved form, to the Dean of the Graduate School at least one week before the date of the thesis examination. The copies will then be distributed to the several members if the examining committee.

**THE EXAMINING COMMITTEE AND THE EXAMINATION:** After consultation with the professor who has directed the thesis, the Dean of the Graduate School appoints an examining committee composed of the director of the thesis and two other members of the Graduate Faculty. The candidate appears before this committee for examination, which usually is restricted to the thesis and to the major field, and lasts for about one and one-half hours.

If the candidate successfully stands his examination, the examining committee certifies to his passing by signing the title page of the thesis. The candidate then returns the original and one carbon copy of the thesis to the Dean of the Graduate School, who deposits them in the University Library.

### *Requirements for the Master of Education Degree*

**PREREQUISITES:** The degree of Master of Education is granted ordinarily only to teachers or to others engaged in educational work.

Before a student is admitted to graduate study for this degree, he must have completed, on the undergraduate level, a minimum of 18 semester hours of approved work in Education, including courses in Educational Psychology, and courses in the History of Education, Educational Sociology, or School Administration.

Early in the program of his work, the student must pass successfully two examinations: (1) a test of general ability, and (2) a test designed to determine his ability to write acceptable English. The

student, before the degree is conferred, must also present evidence testifying to at least two years of teaching experience, gained either before his admission to course work, or concurrently with it.

**REQUIREMENTS FOR THE DEGREE:** The M.Ed. degree may be earned either with or without the presentation of a thesis.

**WITHOUT THESIS:** Students who elect this plan must present a total of 33 semester hours. Twelve hours of this required work must include the *four* basic courses: Education 204, 210, 217, and 235. If a student, by examination, can demonstrate his competency in the subject matter of two of these courses, he may be granted exemption from the required work in these courses. In no case may he claim exemption for more than two.

Other requirements are: a departmental major (i.e., in Nursing Education, Elementary Education, Public School Administration, Public School Supervision, or Secondary Education) of at least 12 semester hours, and a minor of at least 6 semester hours in a department other than Education. Toward the end of his residence the student must pass a comprehensive examination on his departmental major and on the content of the four basic courses. Permission to take such examinations must be obtained from the Director of Graduate Studies of the Department of Education, and a notice of intention must be filed with him at least three weeks before the announced dates of the examinations.

**WITH THESIS:** Students who elect this plan are permitted to substitute a thesis for 6 semester hours of the required course work. The first 12 semester hours must be passed with a grade of "G" (good) on at least 6 semester hours, and with no grade below an "S." The student must also present a thesis subject approved by the Professor of Education who intends to direct it, and by two other members of the staff in Education, including the Director of Graduate Studies. Two of the three members of the approving committee must be permanent members of the Duke University Graduate Faculty. The title of the thesis must be filed with the Dean of the Graduate School at the same time as the titles for the A.M. theses.

In addition to the thesis, the student must present 27 semester hours of course credit. Of these, 6 semester hours must be earned in *two* of the basic courses in the Department; Education 204, 210, 217, or 235. Of the remaining 21 semester hours, 6 semester hours must constitute a minor taken outside of the Department of Education; at least 12 semester hours must be taken in the student's departmental major.

The regulations regarding submission of typed copies of the thesis and the thesis examination are the same as those for the A.M. degree.

**CANDIDACY FOR THE MASTER OF EDUCATION DEGREE:**



After a student who has been officially admitted to the Graduate School has successfully completed 12 semester hours of graduate course work, he may apply for candidacy for the M.Ed. degree. Two conditions must have been met: (1) he must have passed all of his course work with at least 3 semester hours of "G" (good) grade or better; and (2) he must present to the Dean of the Graduate School an endorsement of his candidacy by the Director of Graduate Studies in his major department.

**TIME LIMITS FOR COMPLETION OF THE MASTER OF EDUCATION DEGREE:** The candidate for the M.Ed. degree must complete all of his course requirements and the thesis within a period of six calendar years from the date of his initial registration. Credits earned over a longer period of time cannot be credited toward a degree.

The student who expects to complete all requirements for the M.Ed. degree in the Summer Sessions must file with the Dean of the Graduate School, during the first week of the term when he expects to complete the work, a statement of his intention.

### *Divinity School Studies*

**BACHELOR OF DIVINITY AND MASTER OF RELIGIOUS EDUCATION:** The degrees of Bachelor of Divinity and Master of Religious Education are administered by the faculty of the Divinity School. A limited number of courses carrying credits toward these degrees is listed in this *Bulletin* under the heading of Religion. Persons desiring credit toward either of these degrees must be regularly admitted to the Divinity School, and all courses listed for Divinity School credit must be registered and approved in the office of the Divinity School. This school publishes its own Summer Session *Bulletin*, a copy of which may be secured by addressing The Recorder, The Divinity School, Duke Station, Durham, North Carolina.

# Courses of Instruction



## *Minimum Enrollment Required for Courses*

ALL courses are offered subject to minimum enrollments. The University reserves the right to withdraw undergraduate courses in which fewer than twelve students enroll, senior-graduate courses numbered 200-299 in which fewer than ten students enroll, and graduate courses and seminars numbered 300 or above in which fewer than six students enroll. In withdrawing a course, the University attempts to avoid undue hardships on students. Sometimes, therefore, courses are offered in spite of small enrollments. Courses not listed will be given when a demand develops and an instructor is available. Some instructors, in residence but not on the faculty of the Summer Session, will permit students who wish to complete theses begun during the academic year to enroll in the Summer Session. Such students must present a written request from the supervising instructor to the Dean of the Graduate School and must make an application for enrollment in the Summer Session. If accepted for registration, they will pay the regular Summer Session fees.

## *Department Officers and Regulations*

Departments offering Summer Session programs are listed alphabetically. Under each department is given the name of the chairman and the name of the director of graduate studies. Where departments have set up special regulations for admission to candidacy for the Master's degree, these are included.

This is a condensed description of courses. For a full description, see *Bulletin of the Summer Session*.

### BOTANY

PROFESSOR HUGO L. BLOMQUIST, CHAIRMAN—203 BIOLOGY BUILDING (WEST CAMPUS);

PROFESSOR PAUL J. KRAMER, DIRECTOR OF GRADUATE STUDIES—  
04 BIOLOGY BUILDING (WEST CAMPUS)

For admission to candidacy for the Master's degree in Botany, students must have completed a minimum of eighteen semester hours of biological science, including six semester hours of Botany in courses numbered above 100. Students who have not yet had the minimum eighteen hours, however, may enter higher courses by permission of the instructor, if he is convinced that they can carry the work for undergraduate credit, and may count such work toward the eighteen hours necessary for candidacy.

## FIRST TERM

S235. INTRODUCTION TO FIELD BOTANY.—Prerequisite: one year of botany or equivalent. 3 s.h. MR. ANDERSON

S236. FIELD BOTANY.—Prerequisite: S235 or equivalent. 3 s.h. MR. ANDERSON

S225. SPECIAL PROBLEMS.—Hours to be arranged. STAFF

S356. RESEARCH.—Hours to be arranged. STAFF

## SECOND TERM (Marine Laboratory at Beaufort, North Carolina)

S225. SPECIAL PROBLEMS.—Hours to be arranged. MR. BLOMQUIST

S359. RESEARCH.—Hours to be arranged. MR. BLOMQUIST

## CHEMISTRY

PROFESSOR JOHN H. SAYLOR, EXECUTIVE OFFICER OF THE DEPARTMENT—115A CHEMISTRY BUILDING (WEST CAMPUS); PROFESSOR WARREN C. VOSBURGH, DIRECTOR OF GRADUATE STUDIES—211 CHEMISTRY BUILDING (WEST CAMPUS)

## FIRST TERM

SI. GENERAL INORGANIC CHEMISTRY.—4 s.h. MR. STROBEL

S61. FUNDAMENTALS OF ANALYTICAL CHEMISTRY.—Prerequisites: Chemistry 1-2 and Mathematics 6 or equivalent. 4 s.h. MR. SAYLOR

SI51. ORGANIC CHEMISTRY.—Prerequisites: Chemistry S61. 4 s.h. MR. BRADSHIER

S275. THESIS RESEARCH.—2 to 8 s.h. STAFF

## SECOND TERM

S2. GENERAL INORGANIC CHEMISTRY.—Prerequisite: Chemistry SI. 4 s.h. MR. ALLENSON

S70. QUANTITATIVE ANALYSIS.—4 s.h. MR. HOBBS

SI52. ORGANIC CHEMISTRY.—Prerequisite: Chemistry SI51. 4 s.h. MR. WILDER

## ECONOMICS

PROFESSOR FRANK T. DE VYVER, EXECUTIVE OFFICER OF THE DEPARTMENT—203J SOCIAL SCIENCE BUILDING (WEST CAMPUS); PROFESSOR JOSEPH J. SPENGLER, DIRECTOR OF GRADUATE STUDIES—322 LIBRARY BUILDING (WEST CAMPUS)

## FIRST TERM

S51. PRINCIPLES OF ECONOMICS.—3 s.h. MR. LANDON

S57. PRINCIPLES OF ACCOUNTING.—3 s.h. MR. DICKENS

S58. PRINCIPLES OF ACCOUNTING.—3 s.h. MR. DICKENS

SI15. ECONOMIC GEOGRAPHY: TEACHERS' COURSE.—3 s.h. MR. LEMERT

SI18. ECONOMIC GEOGRAPHY OF THE SOUTH.—3 s.h. MR. LEMERT

SI38. BUSINESS STATISTICS.—Prerequisite: Mathematics 5 or the equivalent. 3 s.h. MR. HANNA

SI43. CORPORATION FINANCE.—3 s.h. MR. JOERG

SI44. INVESTMENTS.—Prerequisites: Economics 57-58 or 60, and I43. 3 s.h. MR. JOERG

SI71. ADVANCED ACCOUNTING.—3 s.h. MR. SHIELDS

SI72. ADVANCED ACCOUNTING.—3 s.h. MR. SHIELDS

- S217. POPULATION PROBLEMS AND RESOURCES.—3 s.h. MR. SPENGLER  
 S236. PUBLIC FINANCE.—3 s.h. MR. HANNA  
 S265. INTERNATIONAL TRADE AND FINANCE.—3 s.h. MR. SPENGLER  
 S275. ADVANCED INDUSTRIAL ACCOUNTING AND MANAGEMENT.—  
 Prerequisite: Economics 171-172 and permission of the instructor. 3 s.h.  
 MR. BLACK  
 S276. ADVANCED INDUSTRIAL ACCOUNTING AND MANAGEMENT.—  
 Prerequisite: Economics S275. 3 s.h. MR. BLACK  
 S318X. THESIS SEMINAR.—Hours to be arranged. MR. LONDON

## SECOND TERM

- S52. PRINCIPLES OF ECONOMICS.—3 s.h. MR. SMITH  
 S173. AUDITING, THEORY AND PRACTICE.—Prerequisite: Economics 171-  
 172 and permission of the department. 3 s.h. MR. MANN  
 S174. AUDITING, THEORY AND PRACTICE.—3 s.h. MR. MANN  
 S181. BUSINESS LAW: CONTRACTS, ETC.—3 s.h. MR. HYLDURG  
 S182. BUSINESS LAW: PARTNERSHIPS, ETC.—3 s.h. MR. HYLDURG  
 S231. THE ECONOMIC HISTORY OF EUROPE.—3 s.h. MR. SMITH  
 S318X. THESIS SEMINAR.—Hours to be arranged.

## EDUCATION

PROFESSOR JOHN W. CARR, JR.—ACTING CHAIRMAN AND DIRECTOR OF  
 GRADUATE STUDIES—104 PAGE (WEST CAMPUS)

For admission to candidacy for the Master of Arts (A.M.) degree with major in Education, or for the Master of Education (M.Ed.) degree, students must, in addition to meeting the general requirements for admission to the Graduate School, meet the following specific requirements: Credit for (1) eighteen semester hours of acceptable prior work in Education and (2) twelve semester hours of acceptable prior work in a minor field. If Psychology, Sociology, Economics, or Political Science is chosen for the minor, six semester hours of work completed after entering the Junior year in college will be accepted.

The degree of Master of Arts is available in the divisions of Public School Administration, Public School Supervision, Secondary Education, Elementary Education and Educational Psychology. Every candidate for the Master of Arts degree in the Department should elect at least twelve semester hours in one of these divisions in which he plans to write his thesis and the remainder of his work, including the six semester hours in his minor, with the approval of the proper division adviser. The degree of Master of Education is available in the divisions of Public School Administration, Public School Supervision, Secondary Education, and Elementary Education.

## FIRST TERM

- S84. SOCIAL FOUNDATIONS OF EDUCATION.—3 s.h. MR. SLAY  
 S118. EDUCATIONAL PSYCHOLOGY: PSYCHOLOGICAL DEVELOPMENT.—  
 Prerequisite: three semester hours in psychology or educational psychology. 3 s.h.  
 MR. OSTWALT  
 S203. PRINCIPLES OF SCHOOL ADMINISTRATION.—3 s.h. MR. BOLMEIER  
 S205. CURRICULUM PROBLEMS IN SECONDARY EDUCATION.—3 s.h.  
 MR. CHILDS  
 S210. INTRODUCTION TO EDUCATIONAL RESEARCH.—3 s.h. MR. STUMPF

S213. PROBLEMS IN THE ORGANIZATION AND ADMINISTRATION OF ELEMENTARY SCHOOLS.—3 s.h. Mr. STUMPF

S216. PSYCHOLOGICAL PRINCIPLES OF SECONDARY EDUCATION.—3 s.h. Mr. CHILDS

S217. THE PSYCHOLOGICAL PRINCIPLES OF EDUCATION.—3 s.h. Mr. EASLEY

S222. THE CURRICULUM AND MATERIALS OF THE ELEMENTARY GRADES.—3 s.h. Mr. HILLMAN

S225. THE TEACHING OF HISTORY AND THE SOCIAL STUDIES.—3 s.h. Mr. MANCHESTER

S232. PUBLIC SCHOOL SUPERVISION.—3 s.h. Mr. HILLMAN  
Mr. HIGHSMITH

S234. SECONDARY SCHOOL ORGANIZATION AND ADMINISTRATION.—3 s.h. Mr. BOLMEIER

S237. THE PSYCHOLOGY AND TEACHING OF READING.—3 s.h. Miss RUDISILL

S238. REMEDIAL READING—PRINCIPLES AND PRACTICE.—3 s.h. Miss RUDISILL

S255. GUIDANCE FUNCTIONS OF THE CLASSROOM TEACHER.—Prerequisites: twelve hours in either education, or psychology, or a combination of the two. 3 s.h. Mr. WEITZ

S258. EDUCATIONAL MEASUREMENTS.—Prerequisite: 12 semester hours in the Department, including a course in educational psychology. 3 s.h. Mr. EASLEY

Thesis research credits are offered in either term by those members of the graduate staff of Duke University who are in residence. For this seminar work either three or six semester hours of credits are given, depending upon the student's period of residence and the work accomplished. Hours are to be arranged by the students and professors concerned. Thesis seminars offered are as follows:

S300X. THESIS SEMINAR IN PUBLIC SCHOOL ADMINISTRATION.

S317X. THESIS SEMINAR IN EDUCATIONAL PSYCHOLOGY.

S334X. THESIS SEMINAR IN SECONDARY EDUCATION.

S337X. THESIS SEMINAR IN ELEMENTARY EDUCATION.

S372X. THESIS SEMINAR IN PUBLIC SCHOOL SUPERVISION.

#### SECOND TERM

S88. EDUCATIONAL PSYCHOLOGY: LEARNING AND MEASUREMENT.—3 s.h. Mr. OSTWALD

S103. ORGANIZATION AND MANAGEMENT OF THE SCHOOL.—3 s.h.

S204. THE SCHOOL AS AN INSTITUTION.—3 s.h. Mr. BOLMEIER

S208A. MENTAL TESTS AND APPLICATIONS.—Prerequisite: Education S258 or six semester hours of other work in educational psychology or psychology. 3 s.h. Mr. GARMEZY

S232. PUBLIC SCHOOL SUPERVISION.—3 s.h. Mr. STUMPF

S233. ADMINISTRATIVE PUPIL ACCOUNTING.—3 s.h.

S235. THE NATURE, FUNCTION AND REORGANIZATION OF THE CURRICULUM.—3 s.h. Mr. CARR

S253. LEGAL PHASES OF SCHOOL ADMINISTRATION.—3 s.h. Mr. BOLMEIER



- S267. THE TEACHING OF SCIENCE IN THE ELEMENTARY SCHOOL.—  
3 s.h. Mr. HAUPT
- S275. THE ADMINISTRATION OF THE AUDIO-VISUAL PROGRAM.—3 s.h.  
Mr. MATHEWSON
- S276. THE TEACHING OF HIGH-SCHOOL SCIENCE.—Prerequisite: at least  
eighteen hours of science in college. 3 s.h. Mr. HAUPT
- S283. SCHOOL PLANT PLANNING.—3 s.h.
- S288. PROBLEMS OF MENTAL HYGIENE AND EDUCATION.—3 s.h.  
Mr. GARMEZY
- S323. PUBLIC SCHOOL FINANCE.—3 s.h. Mr. STUMPF
- For information regarding thesis seminar credits, see Term I.

## NURSING EDUCATION

## A DIVISION OF THE DEPARTMENT OF EDUCATION

MISS DOROTHY SMITH, R.N., DIRECTOR OF THE DIVISION OF  
NURSING EDUCATION. M112 HOSPITAL

## FIRST TERM

- S84N. SOCIAL FOUNDATIONS OF NURSING EDUCATION.—3 s.h.  
Miss INGLES
- S101N. THE CURRICULUM OF THE SCHOOL OF NURSING.—3 s.h.  
Miss SMITH
- S117N. COMMUNITY NURSING.—3 s.h. Miss MASSEY
- S120N. NURSING EDUCATION.—Hours to be arranged. Miss MOSER  
Miss ZUKOWSKI
- S124N. TEACHING OF NURSING ARTS.—3 s.h. Miss CRAWLEY
- S130N. PSYCHOSOMATIC NURSING.—3 s.h. Miss MOSER
- S136N. SEMINAR IN MEDICAL OR SURGICAL SPECIALTY.—3 s.h.  
Miss INGLES
- S192N. PRINCIPLES AND METHODS OF TEACHING IN SCHOOLS OF  
NURSING.—3 s.h. Miss SMITH
- S195N. PERSONNEL WORK IN SCHOOLS OF NURSING.—3 s.h.  
Miss OSTERMAN

## SECOND TERM

- S193N. WARD ADMINISTRATION AND TEACHING.—3 s.h. Miss INGLES

## ENGINEERING

PROFESSOR WILLIAM HOLLAND HALL, DEAN OF THE COLLEGE OF ENGINEERING—  
135 ENGINEERING BUILDING

The Summer Session offerings of the College of Engineering will be limited to those courses needed by students now in school to correct irregularities in their programs of study.

## FIRST TERM

- C.E. 110. PLANE SURVEYING.—Prerequisites: G.E. 1 and Math 6. 4 s.h.  
Mr. BROWN

## SECOND TERM

- G.E. S107. STRENGTH OF MATERIALS.—Prerequisite: G.E. 57. 3 s.h.  
Mr. WILLIAMS

G.E. S128. HYDRAULICS.—Prerequisite: G.E. 57. 3 s.h.

MR. WILLIAMS

M.E. S52. KINETICS-MECHANISM.—Prerequisites: G.E. 2, G.E. 57, Math. 52.  
4 s.h.

MR. REED

## ENGLISH

PROFESSOR WILLIAM H. IRVING, CHAIRMAN—2G-5 WEST DUKE BUILDING (EAST CAMPUS);  
 PROFESSOR PAULL F. BAUM, DIRECTOR OF GRADUATE STUDIES—  
 402 LIBRARY (WEST CAMPUS)

Candidates for the Master's degree in English are expected to have had at least twelve semester hours in undergraduate courses above the sophomore level. The Department may also require additional courses if the work of the student in his first term indicates inadequate preparation.

Master's candidates in English are required to elect S203. Those who have completed as many as twelve semester hours of graduate work should take also the bibliography course, S301, at their earliest opportunity.

## FIRST TERM

S1. ENGLISH COMPOSITION.—3 s.h.	MRS. WHITE
S2. ENGLISH COMPOSITION.—3 s.h.	MR. SANDERS
S119. HISTORY OF THE THEATRE.—3 s.h.	MR. REARDON
S121. PLAY PRODUCTION.—3 s.h.	MR. REARDON
S131. VICTORIAN LITERATURE.—3 s.h.	MR. SANDERS
S156. MODERN BRITISH AND AMERICAN DRAMA.—3 s.h.	MRS. WHITE
S203. CHAUCER.—3 s.h.	MR. BAUM
S227. LITERARY CRITICISM.—3 s.h.	MR. GILBERT
S239. SHAKESPEARE.—3 s.h.	MR. MEYER
S242. ENGLISH LITERATURE OF THE EARLY NINETEENTH CENTURY.—3 s.h.	MR. MEYER
S273. HAWTHORNE AND HENRY JAMES.—3 s.h.	MR. STEWART
S281. METHODS IN THE TEACHING OF SPEECH.—3 s.h.	MR. DICKEY
S282. AMERICAN ORATORY.—3 s.h.	MR. DICKEY
S308X. SEMINAR IN AMERICAN LITERATURE.—Hours and credits to be arranged.	MR. STEWART
S349X. SEMINAR IN ENGLISH LITERATURE.—Hours and credits to be arranged.	MR. GILBERT

## SECOND TERM

S1. ENGLISH COMPOSITION.—3 s.h.	MR. COOK
S2. ENGLISH COMPOSITION.—3 s.h.	MR. BOWMAN
S56. REPRESENTATIVE ENGLISH WRITERS.—3 s.h.	MR. BLACKBURN
S124. SHAKESPEARE.—3 s.h.	MR. BOWMAN
S158. CONTEMPORARY FICTION.—3 s.h.	MR. BLACKBURN
S234. AMERICAN LITERATURE SINCE 1870.—3 s.h.	MR. BRASWELL
S274. MELVILLE.—3 s.h.	MR. BRASWELL

## FORESTRY

PROFESSOR CLARENCE F. KORSTIAN, DEAN OF THE SCHOOL OF FORESTRY AND DIRECTOR  
OF GRADUATE STUDIES—307 SOCIAL SCIENCE BUILDING

Organized course work in the School of Forestry during the Summer Session is limited to plane surveying, forest surveying, and forest mensuration which are required of all students entering upon two years of study in technical forestry leading to the degree of Master of Forestry (M.F.)

Qualified students may engage in thesis research in certain branches of forestry during the Summer Session with the approval of the instructor concerned and the Dean of the School of Forestry or of the Director of Graduate Studies in the case of work taken through the Graduate School.

C.E. S110. PLANE SURVEYING.—Prerequisites: G.E. 1 and trigonometry. 4 s.h.  
Mr. BROWN

S150. FOREST SURVEYING.—Prerequisites: Civil Engineering, S110 Plane Surveying, or equivalent. 5 s.h.  
Mr. RUDOLPH

S151. FOREST MENSURATION.—4 s.h.  
Mr. SCHUMACHER

S261. FOREST SOILS.—Prerequisites: Chemistry 1 and 2, and Physics 1 or equivalents; physical geology, mineralogy, petrology and analytical chemistry are also desirable. 3 s.h.  
Mr. COILE

S357. RESEARCH IN FORESTRY.—Credits and schedule to be arranged.  
STAFF

## FRENCH

PROFESSOR B. R. JORDAN, CHAIRMAN OF THE DEPARTMENT OF ROMANCE LANGUAGES—  
214 CARR BUILDING (EAST CAMPUS)

## FIRST TERM

S1. ELEMENTARY FRENCH.—3 s.h.  
STAFF

S2. ELEMENTARY FRENCH.—3 s.h.  
STAFF

NOTE: A student enrolled in French S2 must also attend French S1.

S3. INTERMEDIATE FRENCH.—Prerequisite: French 1-2, or two units of high school French. 3 s.h.  
STAFF

S4. INTERMEDIATE FRENCH.—Prerequisites: French 3 or equivalent. 3 s.h.  
STAFF

S51. INTRODUCTION TO FRENCH LITERATURE.—Prerequisite: French 3-4, or equivalent. 3 s.h.  
STAFF

S52. INTRODUCTION TO FRENCH LITERATURE.—Prerequisite: French 51, or equivalent. 3 s.h.  
STAFF

## GEOLOGY

PROFESSOR E. WILLARD BERRY, CHAIRMAN—016 SCIENCE (E)

## FIRST TERM

S51. GENERAL GEOLOGY.—4 s.h.  
Mr. BERRY

## SECOND TERM

S52. GENERAL GEOLOGY.—4 s.h.  
Mr. BERRY

## GERMAN

PROFESSOR CLEMENT VOLLMER, CHAIRMAN—106A SOCIAL SCIENCE BUILDING  
(WEST CAMPUS)

S1. ELEMENTARY GERMAN.—3 s.h.  
Mr. MAXWELL

S2. ELEMENTARY GERMAN.—3 s.h.

MR. MAXWELL

NOTE: A student enrolled in German S2 must also attend German S1.

S3. INTERMEDIATE GERMAN.—3 s.h.

MR. WILSON

S4. INTERMEDIATE GERMAN.—3 s.h.

MR. WILCOX

## GREEK

ASSISTANT PROFESSOR JAMES N. TRUESDALE, CHAIRMAN—303 GRAY (WEST CAMPUS)

## FIRST TERM

S121. GREEK LITERATURE: HOMER.

S121.1. 3 s.h.

MR. ROSE

S121.2. 3 s.h.

MR. TRUESDALE

S122. GREEK LITERATURE: THE TRAGIC POETS.—3 s.h.

MR. TRUESDALE

## HEALTH AND PHYSICAL EDUCATION

E. M. CAMERON, DIRECTOR, TRINITY COLLEGE AND COLLEGE OF ENGINEERING—  
109 GYMNASIUM (WEST CAMPUS)MISS JULIA GROUT, CHAIRMAN, THE WOMAN'S COLLEGE—  
101 GYMNASIUM (EAST CAMPUS)

## FIRST TERM

PE S53. HAND-BALL-TENNIS.—1 s.h.

MR. MONTFORT

PE S65. HISTORY AND PRINCIPLES OF PHYSICAL EDUCATION.—3 s.h.

MR. AYCOCK

HE S132. SCHOOL HEALTH PROBLEMS.—3 s.h.

MR. AYCOCK

PE S190. PROTECTIVE PRACTICES IN PHYSICAL EDUCATION.—3 s.h.

MR. MONTFORT

## SECOND TERM

PE S57. VOLLEY BALL-TENNIS.—1 s.h.

MR. MONTFORT

HE S132. SCHOOL HEALTH PROBLEMS.—3 s.h.

MISS McCORMIC

HE S141. PERSONAL HEALTH PROBLEMS.—3 s.h.

MISS McCORMIC

## HISTORY

PROFESSOR WILLIAM T. LAPRADE, CHAIRMAN AND DIRECTOR OF GRADUATE STUDIES—  
2B WEST DUKE (EAST CAMPUS)

For admission to candidacy for a Master's degree in History the student must present a total of eighteen semester hours of prior work in History, of which at least six must be in American History if he plans to take his major work in that field. Before enrolling for thesis supervision, candidates for the Master's degree are required to complete at least three semester hours of seminar work and are strongly urged to enroll for this work in the second term of their attendance in the Summer Session. (See courses numbered 300 or above.)

## FIRST TERM

S51. HISTORICAL BACKGROUND OF THE WORLD TODAY, 1500-1871.—  
3 s.h.

MR. HAMILTON

S91. THE DEVELOPMENT OF AMERICAN DEMOCRACY TO 1865.—3 s.h.

MR. WATSON

S105. ENGLISH CONSTITUTIONAL HISTORY.—3 s.h.

MR. HAMILTON

S113. AMERICA IN THE TWENTIETH CENTURY.—3 s.h.	MR. WATSON
S204. THE UNITED STATES, 1850-1900.—3 s.h.	MR. WOODY
S217. EUROPE SINCE 1870.—3 s.h.	MR. CARROLL
S231. THE HISPANIC COLONIES OF THE NEW WORLD.—3 s.h.	MR. LANNING
S315. SEMINAR IN SOUTHERN HISTORY.—3 s.h.	MR. WOODY
S317. SEMINAR IN MODERN EUROPEAN HISTORY.—3 s.h.	MR. CARROLL
S321. SEMINAR IN HISPANIC-AMERICA AND INTER-AMERICAN RELATIONS. 3 s.h.	MR. LANNING

## SECOND TERM

S52. HISTORICAL BACKGROUND OF THE WORLD TODAY 1871-1940.—3 s.h.	MR. ROPP
S235. WAR IN THE MODERN WORLD.—3 s.h.	MR. ROPP
S237. SOCIAL AND INTELLECTUAL DEVELOPMENT OF THE OLD SOUTH.—3 s.h.	MR. SYDNOR
S315. SEMINAR IN SOUTHERN HISTORY.—3 s.h.	MR. SYDNOR

## LATIN AND ROMAN STUDIES

PROFESSOR ROBERT S. ROGERS, CHAIRMAN—204 CARR (EAST CAMPUS)

## FIRST TERM

S111. ROMAN LITERATURE IN ENGLISH TRANSLATION.—3 s.h.	MR. ROSE
---	----------

## MATHEMATICS

PROFESSOR J. J. GERGEN, CHAIRMAN—220 PHYSICS BUILDING (WEST CAMPUS);

PROFESSOR J. H. ROBERTS, DIRECTOR OF GRADUATE STUDIES—  
219 PHYSICS BUILDING (WEST CAMPUS)

For admission to candidacy for the degree of Master of Arts with major in Mathematics, a student must have a minimum of twenty-four semester hours credit for course work in Mathematics and related fields. This course work must be approved by the Department through the Director of Graduate Studies. It must include differential and integral calculus and an additional six semester hours of work in mathematical courses of at least Junior level.

To obtain the Master of Arts degree with major in Mathematics by Summer Session work, a candidate must complete twenty-one semester hours of course work in Mathematics, six semester hours of course work in a minor field, and a thesis in Mathematics. The course work must be in courses numbered not less than 200. All work must be approved by the Department through the Director of Graduate Studies. To help students meet the thesis requirement, the Department offers Thesis Seminar, S389X, in which supervision of thesis writing is available.

Each student should, as early as possible in his graduate work, discuss his program with the Director of Graduate Studies or his representative.

## FIRST TERM

S5. COLLEGE ALGEBRA.—3 s.h.	MR. HICKSON
S6. PLANE TRIGONOMETRY.—3 s.h.	MR. RANKIN
S53. CALCULUS III.—3 s.h.	MR. DRESSEL
S205. ALGEBRA FROM AN ADVANCED STANDPOINT.—Prerequisite: Calculus. 3 s.h.	MR. GERGEN
S207. SOLID GEOMETRY AND SPHERICAL TRIGONOMETRY FROM AN ADVANCED STANDPOINT.—Prerequisite: Calculus. 3 s.h.	MR. THOMAS



S235. ABSTRACT ALGEBRA I.—Prerequisite: Calculus. 3 s.h.	MR. THOMAS
S241. INTEGRAL EQUATIONS.—3 s.h.	MR. GERGEN
S389X. THESIS SEMINAR.—Thesis credit only.	MR. DRESSEL

## SECOND TERM

S50. PLANE ANALYTIC GEOMETRY.—Prerequisite: Mathematics S5 and S6. 3 s.h.	MR. ELLIOTT
S51. CALCULUS I.—3 s.h.	MR. ELLIOTT
S236. ABSTRACT ALGEBRA II.—Prerequisite: Calculus. 3 s.h.	MR. CARLITZ
S275. PROBABILITY.—Prerequisite: Calculus. 3 s.h.	MR. CARLITZ
SOLID GEOMETRY.—0 s.h.	MR. ELLIOTT

## MEDICAL MYCOLOGY

A month's course in Medical Mycology, under the direction of Dr. Norman F. Conant, is to be offered at Duke University School of Medicine and Duke Hospital, July 2-28, 1951. The course will be offered every day in the week, except Sunday, and has been designed to insure a working knowledge of the human pathogenic fungi within the time allotted.

Emphasis will be placed on the practical aspects of the laboratory as an aid in helping establish a diagnosis of fungus infection. Insofar as possible and as patients become available, methods of collecting materials in the clinic for study and culture will be stressed. Work with patients, clinical material, cultures and laboratory animals will serve as a basis for this course. Also, an opportunity to study pathologic material, gross and microscopic, will be given those whose previous training would allow them to obtain the greatest benefit from a study of such material.

The number of applicants for the course will be limited and the applications will be considered in the order in which they are received. An attempt will be made, however, to select students on the basis of their previous training and their stated need for this type of work.

A fee of \$50.00 will be charged for this course, upon the completion of which a suitable certificate will be awarded. Please direct inquiries to Dr. Norman F. Conant, Professor of Mycology, Duke University School of Medicine, Durham, North Carolina.

## PHILOSOPHY

PROFESSOR GLENN NEGLEY, CHAIRMAN—3-1 WEST DUKE BUILDING (EAST CAMPUS);  
PROFESSOR R. L. PATTERSON, DIRECTOR OF GRADUATE STUDIES—  
3-1 WEST DUKE BUILDING (EAST CAMPUS)

## FIRST TERM

S48. LOGIC.—3 s.h.	MR. WELSH
S91. INTRODUCTION TO PHILOSOPHY.—3 s.h.	MR. WELSH

## SECOND TERM

S48. LOGIC.—3 s.h.	MR. DUNHAM
S94. HISTORY OF PHILOSOPHY: MODERN.—3 s.h.	MR. DUNHAM

## PHYSICS

PROFESSOR WALTER M. NIELSEN, CHAIRMAN AND DIRECTOR OF GRADUATE STUDIES—  
119 PHYSICS BUILDING (WEST CAMPUS)

## FIRST TERM

S51. GENERAL PHYSICS.—Prerequisite: Mathematics 2-5 or equivalent. 5 s.h.  
Mr. CARPENTER

S175. INTERMEDIATE PHYSICS—OPTICS.—Prerequisites: Physics 125 and 126 or equivalent work approved by instructor, and differential and integral calculus. 4 s.h.

S353X. THESIS SEMINAR.—Credits and hours to be arranged. STAFF

## SECOND TERM

S52. GENERAL PHYSICS.—Prerequisite: Physics S51. 5 s.h. Mr. CARPENTER

S176. INTERMEDIATE PHYSICS—THERMODYNAMICS AND KINETIC THEORY.—Prerequisites: Physics 125 or equivalent work approved by the instructor, and differential and integral calculus. 3 s.h.

S353X. THESIS SEMINAR. STAFF

## POLITICAL SCIENCE

PROFESSOR ROBERT S. RANKIN, CHAIRMAN—308 LIBRARY (WEST CAMPUS); PROFESSOR  
R. R. WILSON, DIRECTOR OF GRADUATE STUDIES—311 LIBRARY (WEST CAMPUS)

## FIRST TERM

S61. AMERICAN GOVERNMENT AND POLITICS.—3 s.h. Mr. RICHARDS

S141. PUBLIC REGULATION.—3 s.h. Mr. RICHARDS

S209. STATE AND LOCAL GOVERNMENT IN THE UNITED STATES.—  
3 s.h. Mr. RANKIN

S230. AMERICAN POLITICAL INSTITUTIONS.—3 s.h. Mr. RANKIN

## SECOND TERM

S62. AMERICAN GOVERNMENT AND POLITICS.—3 s.h. Mr. SIMPSON

S125. AMERICAN POLITICAL PARTIES AND PRACTICAL POLITICS.—  
3 s.h. Mr. SIMPSON

S151. LATIN-AMERICAN POLITICAL INSTITUTIONS.—3 s.h. Mr. TRAVIS

S221. INTERNATIONAL PUBLIC ORGANIZATION.—3 s.h. Mr. TRAVIS

## PSYCHOLOGY

PROFESSOR ELIOT H. RODNICK, CHAIRMAN—201 BIVENS BUILDING (EAST CAMPUS);  
PROFESSOR KARL ZENER, DIRECTOR OF GRADUATE STUDIES—205 PSYCHOLOGICAL  
LABORATORY BUILDING (EAST CAMPUS)

For admission to candidacy for a Master's degree in psychology, the student must present a total of twelve semester hours in psychology beyond the introductory course, at least six semester hours of which must be taken in Senior-Graduate courses. In addition he must have credit for Zoology 1-2 or equivalent.

## FIRST TERM

S91-92. GENERAL PSYCHOLOGY.—6 s.h. Mr. GARMEZY

S215. DEVELOPMENTAL PSYCHOLOGY.—3 s.h. Mr. ADAMS

S303. RESEARCH.—3 s.h. Mr. RODNICK

S308. SEMINAR IN PSYCHOPATHOLOGY.—3 s.h. Mr. RODNICK

## SECOND TERM

S204. MOTIVATION AND LEARNING.—3 s.h.

MR. ZENER

S304. RESEARCH.—3 s.h.

MR. ZENER

## RELIGION

PROFESSOR JAMES CANNON, DEAN OF THE DIVINITY SCHOOL—110 DIVINITY SCHOOL (WEST CAMPUS) ; PROFESSOR H. F. MYERS, CHAIRMAN OF THE DEPARTMENT OF RELIGION—204 DIVINITY SCHOOL (WEST CAMPUS) ; PROFESSOR H. SHELTON SMITH, DIRECTOR OF GRADUATE STUDIES—302 DIVINITY SCHOOL (WEST CAMPUS)

## FIRST TERM

S51. THE HISTORY OF THE HEBREW PEOPLE.—3 s.h.

MR. SALES

S52. NEW TESTAMENT LIFE AND LITERATURE.—3 s.h.

MR. SALES

S102. THE CHRISTIAN CHURCH IN THE SOCIAL ORDER.—3 s.h.

MR. ECKARDT

S104. THE HISTORY AND RELIGION OF THE JEWS TO THE ROMAN PERIOD.—3 s.h.

MR. ECKARDT

S114. CHRISTIAN ETHICS.—3 s.h.

MR. BEACH

S198. THE HERITAGE OF THE REFORMATION.—3 s.h.

MR. SCHAFER

S312. (ADVANCED) NEW TESTAMENT THEOLOGY.—3 s.h.

MR. DAVIES

S383. THE CHRISTIAN INTERPRETATION OF HISTORY.—3 s.h.

MR. BEACH

## SECOND TERM

S51. THE HISTORY OF THE HEBREW PEOPLE.—3 s.h.

MR. PERRY

S52. NEW TESTAMENT LIFE AND LITERATURE.—3 s.h.

MR. PERRY

S181. THE NATURE AND EARLY DEVELOPMENT OF RELIGION.—3 s.h.

MR. CANNON

S182. LIVING RELIGIONS OF THE WORLD.—3 s.h.

MR. CANNON

S197. CULTURAL HISTORY OF PALESTINE.—3 s.h.

MR. STINESPRING

S199. THE AMERICAN SOCIAL GOSPEL.—3 s.h.

MR. SMITH

S298. MODERN AMERICAN CHRISTOLOGY.—3 s.h.

MR. SMITH

S310. OLD TESTAMENT PROPHECY.—3 s.h.

MR. STINESPRING

## SOCIOLOGY

PROFESSOR HOWARD E. JENSEN, CHAIRMAN—215E SOCIAL SCIENCE BUILDING (WEST CAMPUS) ; PROFESSOR HORNELL HART, DIRECTOR OF GRADUATE STUDIES—215D SOCIAL SCIENCE BUILDING (WEST CAMPUS)

## FIRST TERM

S101. GENERAL SOCIOLOGY.—3 s.h.

MRS. WHITRIDGE

(Courses 91-92, or 101, or 111, or 112 is prerequisite to all other courses in the Department.)

S158. SOCIOLOGY OF THE PROFESSIONS AND OCCUPATIONS.—3 s.h.

MR. SCHETTLER

S191. PRINCIPLES OF SOCIAL CASE INVESTIGATION.—3 s.h.

MRS. WHITRIDGE

S246. PUBLIC OPINION AND PROPAGANDA.—3 s.h.

MR. SCHETTLER

S250. MARRIAGE AND THE FAMILY.—3 s.h.

MR. HART

S286. SOCIAL ETHICS.—3 s.h.

MR. HART

## SECOND TERM

S235. URBAN SOCIOLOGY.—3 s.h.

MR. THOMPSON

S238. RACE AND CULTURE.—3 s.h.

MR. THOMPSON

## SPANISH

PROFESSOR BRADY R. JORDAN, CHAIRMAN OF DEPARTMENT OF ROMANCE LANGUAGES AND  
 DIRECTOR OF GRADUATE STUDIES—214 CARR BUILDING (EAST CAMPUS) ; ASSOCIATE  
 PROFESSOR GIFFORD DAVIS, DIRECTOR OF THE SCHOOL OF SPANISH STUDIES—  
 213 CARR BUILDING (EAST CAMPUS)

## THE SCHOOL OF SPANISH STUDIES

## FIRST TERM

Students enrolling in these Spanish courses should read carefully the statement  
 on the School of Spanish Studies in the *Bulletin of the Summer Session*.

S1. BEGINNING SPANISH.—3 s.h.

MR. FEIN

S2. BEGINNING SPANISH.—3 s.h.

MR. FEIN

S3. INTERMEDIATE SPANISH.—3 s.h.

MR. DAVIS

S4. INTERMEDIATE SPANISH.—3 s.h.

MR. TORRE

S65. INTRODUCTION TO MODERN SPANISH LITERATURE.—3 s.h.

MR. TORRE

S68. INTRODUCTION TO SPANISH-AMERICAN LITERATURE—3 s.h.

MR. AMOR Y VAZQUEZ

S174. PHONETICS AND DICTION.—3 s.h.

MR. PREDMORE

S256. CONTEMPORARY SPANISH-AMERICAN LITERATURE (1910-1950).—  
 3 s.h.

MR. PORTUONDO

S260. ADVANCED COMPOSITION AND SYNTAX.—3 s.h.

MR. PORTUONDO

S275. CONTEMPORARY SPANISH LITERATURE: ESSAY AND LYRIC  
 POETRY.—3 s.h.

MR. PREDMORE

## ZOOLOGY

PROFESSOR IRVING E. GRAY, CHAIRMAN—218 BIOLOGY BUILDING (WEST CAMPUS) ;  
 PROFESSOR KARL M. WILBUR, DIRECTOR OF GRADUATE STUDIES—  
 328 BIOLOGY BUILDING (WEST CAMPUS)

For admission to candidacy for a Master's degree in Zoology, a student should have completed an undergraduate major in Zoology (courses in General Science and Botany are not counted as a part of a Zoology major). This normally amounts to about twenty-four semester hours, which should be distributed among the various fields of Zoology, and must include Vertebrate Zoology or Comparative Anatomy, Physiology, and Embryology, passed with creditable grades. A candidate should also have completed at least one year of Chemistry. Work for the degree will require eighteen hours in advanced courses in Zoology, and six hours in another department for a minor, in addition to a thesis. Before registration for a degree, students should confer with the Director of Graduate Studies for the Department. Students not candidates for a degree may take courses offered, if they have necessary prerequisites; but may not count them toward a degree until an undergraduate major has been completed.

## FIRST TERM (on Duke Campus)

S1. GENERAL ZOOLOGY.—4 s.h.

MRS. HUNTER

S53. COMPARATIVE VERTEBRATE ANATOMY.—4 s.h. MR. ROBERTS

FIRST TERM (Marine Laboratory at Beaufort, North Carolina)

S203. MARINE ECOLOGY.—6 s.h. MR. GRAY

S212. POPULATIONS.—6 s.h.

S353. RESEARCH.—2 to 6 s.h. MESSRS. GRAY AND BOOKHOUT

SECOND TERM (on Duke Campus)

S2. ANIMAL BIOLOGY.—4 s.h. MR. WHARTON

S92. GENERAL EMBRYOLOGY.—4 s.h. MR. HORN

S231.—ACAROLOGY.—3 s.h. MR. WHARTON

SECOND TERM (Marine Laboratory at Beaufort, North Carolina)

S274. MARINE INVERTEBRATE ZOOLOGY.—6 s.h. MR. REID

S278. INVERTEBRATE EMBRYOLOGY.—Prerequisite: Zoology 92. 6 s.h.  
MR. BOOKHOUT

S353. RESEARCH.—2 to 6 s.h. MESSRS. GRAY AND BOOKHOUT



# ROSTER

1950-1951

TRINITY COLLEGE AND THE COLLEGE OF ENGINEERING

THE WOMAN'S COLLEGE

THE GRADUATE SCHOOL OF ARTS AND SCIENCES

THE DIVINITY SCHOOL

THE SCHOOL OF LAW

THE SCHOOL OF MEDICINE

THE SCHOOL OF NURSING

THE SCHOOL OF FORESTRY

# Degrees and Honors

The following degrees were awarded June 4, 1951:

## A.B. DEGREE

Adams, Morgan Rudolph, Jr.	Brooks, Val Carlton
Adams, Nelson Falls	Brookshire, Samuel James
Adkins, Eli Richard	Brown, James Madison
Akers, Mary Elizabeth	Browning, Virginia Crawford
Albert, Betty Lu	Buchanan, Anne
Allen, Richard C.	Buchanan, John C., III
Allen, Robert H.	Burk, Robert Stuart
Anderson, Catherine Baxter	Bush, Robert Kenneth
Archambault, Normand	Bushnell, George D.
Arendell, Julia Anne	Butz, Mary Sarah
Armstrong, Pete Robertson	Byerly, Charles Tate, Jr.
Arnold, Mary Louise	Byrd, Robert Curtis
Austin, Carol Lynn	Byrne, Sally
Awtrey, Margaret Anne	Calaway, Bill Edward
Bailey, Mary Catherine	Caldwell, Daniel Huffman
Bailey, Phoebe Crane	Callahan, Daniel John
Bain, David Edward	Calloway, Vern Daniel, Jr.
Baird, Bruce K.	Canum, Gertrude Elizabeth
Baldwin, Jackson Lee	Campbell, Robert D.
Baldwin, William Lee	Carioss, Frank Ingalls
Ballentine, Sara Janis	Carter, Luther Jordan
Baroff, Philip	Casseberry, Ruth Ann
Barrett, John Albert, Jr.	Celley, Albert Francis
Barringer, Norma Page	Chadwick, Harry Roberts, Jr.
Bates, Earl Kenneth, Jr.	Chamberlin, Frank Harry
Baxter, Doris Jane	Chambers, Julian Horne, Jr.
Beck, Caroline Adelaide	Chambers, Robert Tillman
Beck, William Harvey	Chapman, Marion Francis
Bell, Leslie Cast	Chappell, Grace Elizabeth
Bennett, Calvin Fletcher	Christakos, Arthur Chris
Best, Charlotte Marian	Christy, John Holmes, Jr.
Best, John Hardin	Clark, Robert Beaumont
Biddisin, Mark	Clark, Seymour Garland, Jr.
Bilogan, Rose Mary	Cleveland, Carol Loraine
Binda, George Edward	Clements, Mary Anne
Bingaman, John William	Clowar, John William
Bingman, Kenneth Ronald	Coble, Barbara Lou
Blackburn, John Oliver	Coggin, Sara Jane
Blanchard, Ralph William, Jr.	Coleman, Patrick Hughes
Blaylock, Daniel Webster, II	Colvin, John Tower
Bliss, George Yemans	Conoly, Suzanne
Bolz, Mary Louise	Cook, Robert Darrow
Boone, Charles Chaffin	Corpening, Barbara Iris
Boone, Emily Milton	Costis, Gus Tom
Borden, Ethel	Craft, Thomas Leroy, Jr.
Borden, Nancy Belle	Craig, Joan
Bourland, William Lee	Crigger, Harry George
Bouton, Freda Lorraine	Crowell, Doris Lee
Bovaird, George C.	Crum, Patricia
Bowman, Lawrence Colin	Dackis, Kalliope Irene
Boyce, Robert Richard Rodney	Davies, Pete James
Boyd, Frederick Daniel	Deyton, Robert Guy, Jr.
Boyer, Barbara Jean	Diamond, Gustave
Boyle, Lillian Gray	Dickens, Mary Fleming
Boynton, Elizabeth H.	Dickens, Wade Hampton, Jr.
Boynton, John Gorham	Dillon, Robert Sherwood
Bradley, Mary Jeanne	Di Mona, Anthony John
Branch, Mary Alice	Dixon, James Lynnewood, Jr.
Brennen, Robert Thomas	Dorman, Charles Thomas
Bridgers, Anne Anderson	Drummond, Heyward Levin
Briggs, James Ethelbert	Duncan, Lewis William
Brock, Aaron Joseph	Dunklee, Edward Fairbanks
Brock, Dorothy Anne	Elliott, Greer Woltz
Bronson, Anne Leake	Ely, Elizabeth Cury
Brooks, Sidney Barclay	Enander, John Ellis

Eng, George E.  
 Ennis, Kathleen  
 Eppley, Ernest Dillard  
 Erickson, John Stuart  
 Erwin, Julian Thomas  
 Eslick, Jack W.  
 Everitt, May Bess  
 Fahey, Francis Patrick  
 Fahringer, Ruth Alvern  
 Falin, Joann  
 Falwell, John James  
 Farinella, Donald Anthony  
 Feaster, Norma Dana  
 Featherstone, Sara Jane  
 Felker, Clay S.  
 Felt, Jeremy Pollard  
 Few, John Francis  
 Fischell, Marian Standard  
 Fisher, Albert Fleet  
 Fisher, Charles Avery  
 Fisher, Robert Lee  
 Flanders, Jane Anne  
 Fleming, Ralph Lang, Jr.  
 Foster, Zaro Elton  
 Fox, Joyce Linthicum  
 Fraser, Joan Gebert  
 French, Ellen Fleming  
 Fulweiler, Robert Edward  
 Gallagher, Jerold Gray  
 Garnett, Ellen Marshall  
 Garvine, Richard Earle  
 Genette, Sidney Wilson, Jr.  
 George, Harris James  
 Gilfillan, Charles McGrew  
 Gill, Harold Eugene  
 Glazier, Leland Cole  
 Glover, Robert Keith  
 Golden, Dorothy Lita  
 Gore, Alice Richards  
 Gore, Tom Winfield  
 Gosnell, Carolyn Forte  
 Gosnell, Clarence William, Jr.  
 Goswick, Claude Benjamin, Jr.  
 Grace, John Vincent  
 Graham, Franklin C.  
 Green, Albert James  
 Green, Fred McOwen, Jr.  
 Grossnickle, William Foster  
 Groves, Miriam Elizabeth  
 Gumkowski, Thaddeus Raymond  
 Gwyn, Patricia Wright  
 Haim, Liam  
 Haldeman, Lillian Virginia  
 Hale, Joseph Malcolm  
 Hall, Jane Madeline  
 Hall, Leslie Marshall, Jr.  
 Hamm, Kyle Edward  
 Hanser, Jana Lucille  
 Harmeling, Jane  
 Harris, John B., Jr.  
 Harris, William Daniel  
 Harrison, Nathaniel Mason, Jr.  
 Harrison, Richard Paige  
 Harvey, Sam L., Jr.  
 Harvard, Dorothy Spicer  
 Hadley, Jimmy Worth  
 Hauser, Betty Lucile  
 Hay, Virginia Anne  
 Hayes, Kendall Preston  
 Hard, Diana Hines  
 Hedlin, Patsy Gordon  
 Helms, William Kendall, Jr.  
 Hermance, Donald Lewis  
 Herndon, Joyce Camille  
 Herr, Billye Barr  
 Hibbits, Josiah Benjamin  
 Higgins, Fred Clay, Jr.  
 Hill, Hoyt G.  
 Hodgson, Nancy Lombard  
 Hodgson, Thomas Salkald  
 Hoey, Franklin James

Hogg, William James  
 Hogue, Ann Carol  
 Holland, Bobby Fagan  
 Holland, Darrell Massey  
 Holyfield, William G., Jr.  
 Hoshall, Lee David  
 Houck, Margaret Ann  
 House, Mary Elizabeth  
 Huber, Donald Simon  
 Hudgins, Walter Edward  
 Hudson, Isham Barney, Jr.  
 Hughes, Thomas P.  
 Hunt, Nancy Maxine  
 Hurst, Elizabeth June  
 Hyatt, Edward  
 Imiler, Ruthann  
 Ingram, George Stephen  
 Irwin, William Paul  
 Isley, Hugh Galloway, Jr.  
 Jacobsen, Magne André, Jr.  
 James, Jean Reid  
 Johnson, Harry Wallace  
 Johnson, Lee  
 Johnson, Virginia Mae  
 Johnston, Cyrus Conrad, Jr.  
 Jones, Charles Albert  
 Jones, Douglas Johnson  
 Jones, Jo Ann  
 Jones, Robert Quince  
 Jordan, Benjamin Everett, Jr.  
 Kane, Harriet Dickey  
 Katzenmeyer, William Gilbert  
 Kay, Toombs Hodges, Jr.  
 Kelley, Kenneth Charles, Jr.  
 Kelly, Walter Richard, Jr.  
 Kenion, Eugene Grant  
 Kennedy, James Arthur  
 Kenyon, Elizabeth Pentecost  
 Kersey, James Stuart  
 Keye, Paul Failor  
 King, Robert David  
 King, William Payne  
 Kingery, Robert Elliott  
 Kinnikin, Janice Jeannette  
 Kirchofer, Roger Beeson  
 Kiser, Bobbie Jo  
 Klees, Robert Edwin  
 Klein, Lewis Philip, Jr.  
 Knight, Virginia Frances  
 Koestline, Charles Norman  
 Kuman, Arthur I.  
 Landau, Edward Jay  
 Landon, Horace Gordon  
 Lane, Benjamin Forrest  
 Lang, William Steve, Jr.  
 Lanning, Jeremy Cushman  
 Larkin, Jeanne Gaines Outlaw  
 Larson, Paul Ernest  
 Lee, Diane Baylor  
 Lee, James Edward  
 Lee, John Marshall, Jr.  
 Lee, Raymond William, Jr.  
 Leeper, Doris Marie  
 Le Gore, Norman Chester  
 Lenning, Dorothy Ann  
 Levering, Mildred Carolyn  
 Levy, Irving Hirsch  
 Lewis, Robert Dobbins  
 Linaweaver, Paul Glenwood, Jr.  
 Lindsey, John Morton  
 Lindsey, Love Loureen  
 Lloyd, Leonard Walter  
 Lockhart, Mary Jane  
 Loehr, John Lyle  
 Long, Myrtle Elaine  
 Lounsbury, Richard Earl  
 Lucas, Charles Fred, Jr.  
 Lugenbeel, Archie Greenberry, Jr.  
 Lunger, Marian Lillian  
 Lustig, George Alexander  
 Lydon, Elizabeth Anne

- Lynch, Hal Lancaster, Jr.  
 Mabry, Henry Filmore  
 Macfarlane, John Granger, II  
 Mairs, Robert Louis  
 Marjenhoff, August John  
 Markwell, Patricia Ruth  
 Martin, Norma Louise  
 Masteller, Daryl Edwin  
 Mathers, Robert W.  
 Matheson, James Leonard  
 Mathis, Archie Madison, Jr.  
 Mattox, Huitt Everett, Jr.  
 Mauney, Edgar Alonzo, Jr.  
 Mauney, William Shayle  
 Maxwell, John Wallace  
 May, Barbara Watkins  
 May, Cecil Dalton  
 McAlister, Patricia M.  
 McBride, Jacqueline Faye  
 McCormic, Joyce  
 McCraw, Ray Clifton  
 McDonald, Mary Alice  
 McDougald, Robert Eubanks  
 McElrath, Mary Jane  
 McFadden, Robert L.  
 McGranahan, Fred Nelson, Jr.  
 McGranahan, William Scott, Jr.  
 McLawhorn, Madge Gay  
 McLennan, Louis Watson  
 McLeod, Robert Frankliu  
 McMahan, James Gillman, Jr.  
 McMaster, Fitz-John Creighton  
 McMullan, Anne Skinner  
 McMullan, Mary Freeland  
 McNamee, Julia Patricia  
 Meredith, Winfield Scott  
 Midgett, Elizabeth Bell  
 Millard, Robert Frederick  
 Miller, John Upshaw  
 Mitchell, Frederic Lockwood, Jr.  
 Mitchell, Mary Jones  
 Montgomery, Shasta Novelline  
 Moore, Burt Hitchcock  
 Moore, William Travis  
 Morgan, Everette Lee, Jr.  
 Morrell, Monna Lea  
 Morse, Carolyn Beeson  
 Moseley, Katharine Templeton  
 Moser, Daniel Boone  
 Mougey, Paul Howard  
 Moyer, Jean Arlene  
 Mullinix, Howard Earl, Jr.  
 Mund, Margaret Eileen  
 Mundy, Elbert Johnson, Jr.  
 Murdoch, Evelyn Janet Barbara  
 Murray, John P.  
 Nance, Ruth Myers  
 Nania, Frank  
 Neal, Charles Bodine, III  
 Newman, Jeannine  
 Nicholson, James Lloyd, Jr.  
 Novick, Marshall Irwin  
 Nunn, Delmas Coleman, Jr.  
 Oglukian, Raymond Levon  
 Olds, Marjorie Louise  
 Olive, Patsy Branch  
 Ontrich, Beryle Leslie  
 Orr, Harry Allen, Jr.  
 Orzano, Randel M.  
 Osborn, Robert Emerson  
 Oster, Howard Stanton, Jr.  
 Owen, Edsel McGuire  
 Paddock, Nancy Ellen  
 Paetzell, Dorris Marie  
 Pagter, Amos Townsend, Jr.  
 Palmer, Ainslie Louise  
 Park, Eileen Ora  
 Pate, Robert Bruce  
 Patterson, Sam Polk  
 Patton, Mildred Jones  
 Paul, Albert Benner  
 Paulsen, Charles Richard  
 Pentz, Joyce  
 Perkins, Donna Jean  
 Perkinson, Seth Jones, Jr.  
 Peterson, Robert Taylor, III  
 Platte, Wende Jane  
 Plummer, Beatrice Choate  
 Poole, Elliott Bruce  
 Postou, Howard Henry, Jr.  
 Powers, Noyes Thompson  
 Praeger, Elinor  
 Prairie, Robert Lyle  
 Prestwich, Jane  
 Procter, Elizabeth Marriott  
 Propst, Arnold Marion  
 Pugh, Winifred Jean  
 Pullen, Dale Dungan  
 Pullen, I. Wendell  
 Purves, Richard Eugene  
 Putnam, John Graves, Jr.  
 Pyle, Robert Henry  
 Quillian, Harriet Sandeford  
 Radner, Sanford Richard  
 Ramsaur, Edmund George, Jr.  
 Ray, Herbert Howard  
 Reardin, Charles Richard, Jr.  
 Reep, Bryan Rufus  
 Reeves, Ernest Gene  
 Reeves, Thomas C.  
 Renfrow, Robert Perry  
 Ressler, Duane W.  
 Reynolds, Raymond E.  
 Rhodes, Dean  
 Rice, William Henry  
 Rickard, Robert Stanley  
 Robertson, William Badger  
 Roesch, Sibylle Diane  
 Rose, Carl Preston  
 Rose, Charles Alexander  
 Roseberry, Philip Leon  
 Rosenberg, Dietrich F.  
 Rosenberg, Robert Harold  
 Roseublum, Judith Louise  
 Ross, James V., Jr.  
 Ross, Jean Shirley  
 Ross, John Joseph  
 Rostad, Ole Magnus  
 Roth, Arnold Israel  
 Rusack, Elizabeth Frost  
 Salomon, Ferdinand Lewis, II  
 Sandefur, Earl Wilton  
 Sanders, Mary Alice  
 Schermerhorn, Jennette Ives  
 Schneider, Joan Kathryn  
 Schreiner, Ruth Irene  
 Schrider, Jane Louise  
 Schuler, Inés Florence  
 Schwarz, Robert James  
 Seaton, Edwin Claude  
 Shackelford, Robert Glenn  
 Shapiro, Herbert Sanford  
 Shelley, George LeRoy, III  
 Sherrill, Frank Carlyle, III  
 Sherrill, Nancy Newburn  
 Sherman, Virginia Anne  
 Shore, George Edward  
 Shore, Lelia Laura  
 Shuford, William Albert  
 Shulsinger, Joseph  
 Silkett, Robert Tillson  
 Sirois, Richard Albert  
 Sizemore, Farish Banks  
 Slane, John Clarke  
 Sledge, John Burton, Jr.  
 Slocum, Joanne  
 Slocumb, Marvin Benton  
 Slone, Harry Lee  
 Smith, Frederick Robert, Jr.  
 Smith, Issabella Peggy  
 Smith, John Newton, Jr.  
 Smith, Lena McArthur

Smith, Micah Jenkins  
 Smith, Rebekah Ann  
 Smith, Richard Bowden  
 Smith, Sterling Lee  
 Smith, William Monroe  
 Smitherman, Frank Byron, Jr.  
 Suively, Lawrence White, Jr.  
 Snow, John Wesley  
 Solomon, James Russell  
 Sowers, Ella Frances  
 Spann, Guy Stewart  
 Sprague, R. Norman  
 Stamey, Ben Franklin  
 Starnes, Philip Jackson  
 Steagall, Robert Worth, Jr.  
 Stebbins, Helen Yvonne  
 Steinmetz, Dorothy M.  
 Sterling, Lehman N.  
 Steuer, Arthur Henry, Jr.  
 Stokes, Frank Stewart, Jr.  
 Stormont, Mary Lytle  
 Strasser, Richard I.  
 Strauss, Saul  
 Street, John Scott, Jr.  
 Strickland, Elizabeth Wells  
 Stride, Richard Joseph  
 Stringer, Arthur John, Jr.  
 Strott, John William  
 Stroud, Mary Jo  
 Sublett, Henry Lee, Jr.  
 Sullivan, Edward James, Jr.  
 Sullivan, Emily Coy  
 Sumara, Charles K. George  
 Swain, William Alexander, III  
 Swiger, Julia May  
 Sykes, John Howard  
 Tapley, John Mark  
 Tate, Joan Foster  
 Taylor, Kenneth Moody  
 Terry, Isaac H., Jr.  
 Thigpen, Richard Elton, Jr.  
 Thomas, Mary MacKenzie  
 Thomas, Richard Lincoln  
 Thomas, Robert C.  
 Thompson, Blaine Calvin  
 Thompson, Ramona Dolores  
 Throckmorton, Charles Withers, III  
 Tillett, Anne Parker  
 Townsend, James Joye  
 Townsend, Lillian Grainger  
 Trent, Mary Biddle  
 Trevvett, William Stuart, Jr.  
 Trimmer, Mary Elizabeth  
 Tu, Tien-Chung  
 Tucker, Donald Wood  
 Tybout, Frederick Alton  
 Tyson, Tommy  
 Unangst, Joanne  
 Underwood, George Dewey, Jr.  
 Underwood, Jack Lawrence  
 Van Der Beck, Karl  
 Van Skike, Robert Bruce, Jr.  
 Veith, Frank Herman, Jr.  
 Viau, Louis John, Jr.  
 Voegelin, Joan  
 Wadlington, Walter James  
 Waggoner, Georgianne  
 Wagner, Claude Marie  
 Walker, Donald  
 Walker, Patricia Anne  
 Walton, Eleanore Corsina  
 Ward, Frances Annette  
 Ware, Henry Neill  
 Warmath, John Thomas, Jr.  
 Waybright, Mary Elizabeth  
 Weaver, Lucius Stacy, Jr.  
 Webster, Richard Carlton  
 Weidman, John Charles, Jr.  
 Weir, Jean Shirley  
 Wheaton, Scott Rodgers  
 White, Barbara G.  
 White, Edgar Farrell, III  
 White, Frank Paul  
 White, Johnnie Robert, III  
 White, Phyllis  
 White, William Foster, Jr.  
 Whitener, Fred William  
 Whittle, Mary Eliza  
 Wiencke, Marian Louise  
 Wilder, Buna Joe  
 Wile, Homer Wayne  
 Wiles, Bennie Miller  
 Wiles, Jeanne Hight  
 Wilkins, Mary Alice  
 Wilson, Carol Jean  
 Wilson, Charles Howe  
 Winters, Albert Cornelius, Jr.  
 Withers, Kenney  
 Witherspoon, Loy Hawn, Jr.  
 Withrow, Pat Berry, III  
 Wolfe, Thomas Redwine, Jr.  
 Wood, William Clark  
 Wood, William Moncrief  
 Woodall, Ann Wescott  
 Woodward, Consuelo Louise  
 Woodward, Dorothy  
 Woodward, Sara Elizabeth  
 Worley, Jane Blakley  
 Yarin, Elaine Ruth  
 Young, James Morningstar  
 Young, Robert Everett  
 Ziolkowski, Theodore Joseph

B.S. DEGREE

Adcock, Louis Henry  
 Beck, Wade Hampton, Jr.  
 Bercovitz, Mary Caroline  
 Blanton, Keith Gilbert  
 Boone, Rachael Suzanne  
 Boshinski, Edwin E.  
 Couble, Judith Patricia  
 Cuyler, R. Duncan  
 Evans, Thomas Everett  
 Faley, Richard W.  
 Fick, William George, Jr.  
 Fry, John Sedgwick  
 Gibson, John Douglas Southmayd  
 Goodman, Marilyn Bertha  
 Gossett, Charles Robert  
 Henchie, Janet Hamilton  
 Hodgson, Richard Holmes  
 Hooks, Mary Milburn  
 Knott, Sarah Ann  
 Morris, Thomas Wendell  
 Northam, Richard Alan  
 Simmons, Bowen Eugene  
 Sliker, Alan W.  
 Tippy, Harold G.  
 van Dobbernburgh, Ida Anna Maria  
 Wastler, Nancy Ramey Demarest  
 Welsh, John Frederick  
 Womble, William Lansden

B.S. DEGREE IN NURSING EDUCATION

Auter, June Madeleine  
 Bieber, Elsie Ruth  
 Boone, Edith Gray  
 Butler, Erma Maude  
 Kyle, Helena Dutton  
 Saul, Nancy Louise  
 Tully, Ardenia Miffleton



## B.S. DEGREE IN CIVIL ENGINEERING

Borst, Robert Meredith  
 Browne, Thomas Banks  
 Cooley, Irwin David  
 Cressman, Robert Allen  
 Duttweiler, Charles  
 Ehrman, Rodolfo de Obarrio  
 Eisaman, Jack V.  
 Eisenbrandt, Frederick Henry, Jr.  
 Harward, Ernest David, Jr.  
 Hill, David William

Kenaston, Robert Allen  
 Otis, George Leslie, Jr.  
 Pearson, Eugene David  
 Priester, John David  
 Rowe, Alan Laurie  
 Van Buren, Wesley C.  
 Westmoreland, William V., Jr.  
 White, Arthur Remington, Jr.  
 White, Raymond H., Jr.  
 Woodfield, Roland L.

## B.S. DEGREE IN ELECTRICAL ENGINEERING

Bowers, Gilmore  
 Carpenter, Harry Everett, Jr.  
 Cates, Walter Elmer  
 Combs, Richard Leigh  
 Denton, Robert Hurd, Jr.  
 Fiegel, Harvey Edward  
 Fox, Edgar Charles, Jr.  
 Frame, Norman Renville, Jr.  
 Komlosi, Eugene James  
 Lowe, Elwyn Hardin  
 Melton, Nichols J.  
 Merritt, Glen Carl

Mickle, Andrew  
 Murph, Daniel Shuford, Jr.  
 Newman, Edmund Henry  
 Premo, Don A.  
 Ridout, Robert Charles  
 Rymer, Jackson S.  
 Shirk, Wesley H., Jr.  
 Tinsley, Charles Crawford, Jr.  
 Townsend, Donald Hall  
 Wihner, William Blackiston, VI  
 Wolmering, Robert John  
 Wright, Robert Toombs

## B.S. DEGREE IN MECHANICAL ENGINEERING

Autry, Elwin Benjamin  
 Bradbury, William C.  
 Bukowitz, Marvin David  
 Bush, Chandler Mathewson  
 Cannon, Kenneth F., Jr.  
 Chrisfield, Norman Edward  
 Christy, Jack Smith  
 Colenda, Herbert Fentriss  
 Cook, Harold J., Jr.  
 Dellinger, David Carol  
 Fenner, William Eaton  
 Fischell, Robert E.  
 Friedman, Burnam Ivan  
 Fritz, Edmund William, Jr.  
 Fullerton, John Carr, Jr.  
 Grove, Charles David  
 James, William Edward  
 Johnson, Clarence Anthony, Jr.  
 Kastrinelis, Peter L.  
 Landis, Harold Hamilton  
 Lanning, Richard Lester  
 Lord, Melvin Henry, Jr.  
 Lucas, Charles DeForest, Jr.

Maass, William Harold  
 MacDonald, Alan Gray  
 Macht, Stuart Martin  
 Martin, John Daniel  
 McCall, Loyd Henry, Jr.  
 McConnell, Arthur Weir  
 McKelvie, Milton James  
 Miller, Paul Joseph  
 Mitchell, Monroe Sellers  
 Newton, Walter Cheek, Jr.  
 Noell, Algernon Stanford, Jr.  
 Phillips, Joe Richard  
 Reinhart, Henry P.  
 Rusack, John D.  
 Shaw, James Harvey  
 Smith, E. Byron  
 Treat, Charles William  
 Tronolone, Nicholas, Jr.  
 Van Dyck, Robert Laird  
 Walker, Emanuel Jaynes  
 Waner, Paul Glee, Jr.  
 Weber, Wheeler Davis  
 Yourison, James Edward

## DIPLOMA IN NURSING

Allen, Margaret Joan  
 Bartlett, Lovene M.  
 Cato, Alma Sox  
 Coleman, Betty Jean  
 Coleman, Norma Lee  
 Cook, Annie Luella  
 Cress, Vivian Elizabeth  
 Erskine, Betty  
 Gilman, Roxanne Bonnaville  
 Herndon, Mary Yvonne  
 Hiltzheimer, Jane Senter  
 Hughes, Martha Bee  
 Jaeger, Margaret Ann  
 Jenkins, Lucia Murchison  
 Ledford, Ethel Aileen  
 Lewis, Myrtha Rosalee  
 Mahaffee, Margaret Fortune  
 Menefee, Mary Ann  
 Morris, Jacqueline  
 Muldrow, Leonora Jeannette

Nelson, Hilda Olive  
 Nicholson, Mary Elizabeth  
 Parsons, Nancy Ellon  
 Perkins, Carolyn Mae  
 Plyler, Anna Clark  
 Scott, Kitty Jane  
 Smith, Jane  
 Snell, Anne Martha  
 Stanford, Jean Elizabeth  
 Stewart, Mildred Louise  
 Sutherland, Dotye Louise  
 Tate, Mar Jo  
 Teal, Betty Jean  
 Tisdale, Suetta  
 Truelove, Martha Jean  
 Walters, Pauline Jane  
 Watson, Betty Jewel  
 Williams, Roberta Elizabeth  
 Wright, Wilma Roberta

## B.S. DEGREE IN MEDICINE

Hiatt, Rudger Puckett  
 Mabry, Edward Bloxton

Sellers, Alfred Mayer  
 Williams, Oscar Brown, Jr.

## M.R.E. DEGREE

Enloe, Martha Eleanor  
 Kirk, Barbara J.

Peoples, Doris

## M.ED. DEGREE

Carter, Katherine Bradley

## M.F. DEGREE

Allan, Kenneth Mathews  
 Applefield, Milton  
 Barnes, Robert Lloyd  
 Bell, John Frederick  
 Bennett, Frank Autrelle  
 Breadon, Robert Edwin  
 Byers, Donald V.  
 Cantelou, Lamar Black  
 Curle, Lawrence Duke  
 Diamond, Sidney  
 Dixon, Arthur Curtis  
 Fercnce, George Melville  
 Ferguson, Edwin Roudillon  
 Follett, George Leonard  
 Forsyth, Harold Frederic, Jr.  
 Furuival, George Mason  
 Gilmer, William Dryden  
 Glabau, William Edward  
 Haislet, John Aulden  
 Hawes, Raymond Burke  
 Ince, Gordon Anthony  
 Lamond, Leo Daniel  
 Larrabee, Donald Ralph

Lee, Robert Emil, III  
 Maple, William Robert  
 Massey, William Everard, Jr.  
 May, Robert Legard  
 McClurkin, Douglas Charles  
 Michell, Arthur Stephen  
 Parker, James Austin  
 Phelps, William Robert  
 Phythyon, Hugh Reed  
 Powell, Louis William  
 Pomerening, Donald Alfred  
 Ray, Philip Lancaster  
 Schwartz, Charles Murray  
 Smith, Waring Wright, Jr.  
 Thornton, Ernst Seemanu  
 Linde, Frank Vande  
 Wagoner, Howard Eugene  
 Whitman, Joseph Atwood, Jr.  
 Whitney, Richard Boardman  
 Williams, Webster Douglas  
 Wray, Clayton Junior  
 Zahner, Robert

## A.M. DEGREE

Baker, Lula Evelyn  
 Bebout, Donald Edward  
 Blackshear, Katherine Baker  
 Boardman, William K., III  
 Burkus, Jean  
 Carson, Ruth Sullivan  
 Cole, Benjamin Theodore  
 Cox, Dou Knowlton  
 Dale, Philip Major, Jr.  
 Davis, Rodney Oliver  
 Dawes, Mary Josephine  
 Delgado, Nelle Smith  
 Emma, Ronald D.  
 Esthus, Raymond Arthur  
 Foreman, Charles William  
 Gavey, John, Jr.  
 Godsey, James Howard  
 Greenberg, Arthur  
 Hancock, Carolyn Lois  
 Hirata, Arthur Atsunobu  
 Howard, Frederick Kennedy  
 Ivie, M. Edith Jones  
 Little, Sue Allou Warren

Luvaas, Morten Jay  
 MacKorell, Mary Bowers  
 Clark, Nelly Maldonado  
 McElroy, David Brian  
 McLaurin, Wayne  
 McMilleu, Shirley Margaret  
 Murray, Edward James  
 Najam, Edward William  
 Nichols, Lawrence Richard  
 Pugh, Olin Sharpe  
 Ratliff, Charles Edward, Jr.  
 Rentz, Thomas Eugene  
 Richter, Melissa Lewis  
 Robinson, James Thompson  
 Swanson, William Edward  
 Thompson, Earle Crosland  
 Turner, William Calhoun  
 Van Fossen, Richard Waight  
 Veit, Natalie Iris  
 Wallace, James Neill  
 Wiles, Mary Elizabeth  
 Winer, Ruth C.  
 Wishner, Raymond Philip

## B.D. DEGREE

Austin, Harold Covington  
 Barlow, Hubert Lee  
 Beane, Kenneth Eugene  
 Brown, James Collins Parker  
 Burgess, Stanley Clyde  
 Caldwell, Ralph Martin, Jr.  
 Carpenter, James Anderson  
 Casey, Joseph Howard  
 Chang, Timothy Scott  
 Charlton, David Wayland, Jr.  
 Crawley, Robert Pinckney  
 Davidson, Barney Lee  
 Davis, Herman Fred  
 Fitzgerald, Ernest  
 Fogleman, Clarence Millard, Jr.  
 Ford, J. Emerson, Jr.  
 Golden, Jacob Bowles

Henley, George Gray  
 Moore, Kenneth Robbins  
 Moore, Robert Freeman  
 Park, Marvin Ross, Jr.  
 Payne, Don Aubrey  
 Peters, Gervaise Francis  
 Richardson, John Earl  
 Smith, William Poole  
 Squires, Donal Morley  
 Swain, David Lowry  
 Walton, William Carlisle, Jr.  
 Warren, George Bernhardt  
 Williams, Clarence Daniel  
 Wilson, Alvin Austin  
 Winegeart, Jack Stroud  
 Youngblood, William Lee

## LL.B. DEGREE

Anderson, Hugh Roger  
 Allen, Carnot R., Jr.  
 Barfield, James Roy  
 Bebout, Donald Richard  
 Boddie, Grace Collins

Booker, James Jackson  
 Bostwick, John Allen, Jr.  
 Browning, James Richardson  
 Chaffin, John Taylor  
 Chappell, Thomas Tye, III

Clement, Robert Lebby, Jr.  
 Dodge, Harold Thaddeus  
 Douglas, Richard Sands  
 Dufour, Alfred Edmundston  
 Dufour, Milly Smith  
 Ely, William Thomas  
 Engelman, Morton H.  
 Everett, Ned Pervis  
 Fleming, James Carlton  
 Foss, George Bridges, Jr.  
 Foster, Russell D.  
 Glickfield, David  
 Godfrey, George Franklin  
 Gore, Jay, Jr.  
 Gregg, James Russell  
 Grist, William Taylor  
 Harlem, Arnold  
 Harrington, John Allen  
 Hawkins, James Robert  
 Herrick, John Waters  
 Hiaasen, Kermit Odel  
 Holmes, James Theodore  
 Howe, Standish Sturtevant  
 Howe, William Bell White  
 Jack, Robert George  
 Kanehann, William Nicholas, III  
 Klein, Frederic Milton  
 Koski, Henry William  
 Kupp, Elaine Beatrice  
 Larned, George Hambrury  
 Loeser, Edward Arthur  
 Malloy, Cormac Joseph  
 Marsh, John E., Jr.  
 Martin, George Wilson

Marx, Edward Elias  
 McCoy, John Philip  
 McKinnon, Arnold Borden  
 Millar, William Imber  
 Morrow, George Richard, Sr.  
 Morton, Marion Billy  
 Nazor, Gordon Lang  
 Nichols, Frank David  
 Olsen, Robert Wayne  
 Oppenheim, Alfred Martin  
 Orr, George Eadie  
 Page, Robert Lionel  
 Perlis, Marvin Elliott  
 Perry, James F.  
 Pierce, John Everett, Jr.  
 Rabin, David  
 Rickman, William Millender  
 Rosenberg, Frederick Dietrich  
 Russell, Howard Mills  
 Scott, James Allen  
 Shell, Vernon Melvin  
 Simmons, Roy G.  
 Spence, Charles Wilson  
 Stearns, Donald Mosure  
 Stevenson, William H., Jr.  
 Styers, Robert Lee  
 Surratt, John Richard  
 Thomaides, Theodore George  
 Thomasson, George Butler  
 Thomasson, James Toombs, Jr.  
 Vann, Arthur  
 Villanueva, Charles Edward  
 Wright, James Victor  
 Zwanetz, David

## LL.M. DEGREE

Fisanick, Vasil  
 Foster, Robert Watson  
 Hardin, Walton

Irwin, John Jackson, Jr.  
 Lindsey, Harold Isaac

## M.D. DEGREE

Agner, Roy Augusta, Jr.  
 Austin, Charles Newton  
 Austin, James Howard  
 Bell, William Sterling  
 Bledsoe, Robert Eugene  
 Blue, Willis Berton  
 Booker, Laurena Park  
 Brock, Julian Stanley  
 Castle, Charles Hilmon  
 Chase, George Oscar  
 Coggins, Deborah Ferne Reed  
 Coggins, Wilmer Jesse, Jr.  
 Coleman, Blair Pickens  
 Conover, Raymond Everett  
 Cook, Paul Hule  
 Cranford, James Abram, Jr.  
 Curtis, Thomas Edwin  
 Daniel, Thomas Manning  
 Dimmette, James Edwin  
 Drake, David Ewing  
 Easterling, John Garlick  
 Engel, Marvin Franklin  
 Evans, Eugene Goldsmith, Jr.  
 Fair, William Leonard  
 Fink, Chester Walter  
 Gorsuch, Thomas Leonard  
 Green, Paul, Jr.  
 Haltiwanger, Earl, Jr.  
 Hanes, Kenneth Frederick  
 Hanson, Charles Andrew  
 Hersherberger, Robert LeRoy  
 Hiatt, Edwin Peele  
 Hiatt, Rudger Puckett  
 Holland, Malvern Carlyle  
 Honig, Edward Irving  
 Horne, Francis Gregg  
 Inman, Charles Ernest  
 Jackson, Beverly Joy Neely

Jackson, Murray Threadgill, Jr.  
 Jaeger, Carl Alphons  
 Johnston, David Hale  
 Kandel, Robert Franklin  
 Lockhart, David Armistead  
 Luzadre, John Hinkle  
 Lyons, William Reginald  
 Mandanis, John Peter  
 Mangum, Jack Fitch  
 McFadyen, Susan Routh  
 McGee, Harry Hand, Jr.  
 Melero, Andrés Tarcisio  
 Mertz, Joanne Elizabeth  
 Parapid, Nicholas Vladimir  
 Pruett, Charles Danny  
 Ragland, John Elliott  
 Remus, Luis Enrique, Jr.  
 Reynolds, David Hyatt  
 Rice, Alonza Douglas  
 Schmidt, Evelyn D.  
 Schnoor, Ernest Edgar  
 Sellers, Alfred Mayer  
 Shancroft, Donald Yeoman  
 Smith, Jesse Graham, Jr.  
 Stanley, Gordon Douglas  
 Sullenberger, John William  
 Underwood, Russell Spaldon  
 Walker, William Freeman  
 Walters, Paul Allen, Jr.  
 Warren, Joseph Benjamin  
 Welch, James Edward  
 Wester, Thaddeus Bryan  
 White, Ben Terry, II  
 Whitesides, Edward Steele  
 Williams, Harold Lee  
 Williams, Louis Howard  
 Wingfield, Robert Terrell  
 Worthington, John William, Jr.

## D.F. DEGREE

Deetlefs, Philippus Petrus du Toit

Labyak, Leo Francis

## PH.D. DEGREE

Anderson, Roy Stuart, A.B., Clark University; A.M., Dartmouth University.

Dissertation: "Line-breadth Studies of the Microwave Spectrum of Oxygen."

Bates, William W., B.S., The Citadel.

Dissertation: "The Electric Moments of Some Acid Amides."

Battle, Guy Arthur, Jr., A.B., A.M., Duke University.

Dissertation: "A Study of Arnold's 'Sohrab and Rustum.'"

Boyce, John Shaw, Jr., B.S., M.F., Yale University.

Dissertation: "Needle Browning of Southern Pines with Special Reference to the Fungus *Lophodermium Pinastri* (Schräd.) Chev."

Braverman, Howard, A.B., Brooklyn College; A.M., Duke University.

Dissertation: "Calvin Henderson Wiley, North Carolina Educator and Writer."

Brysk, Henry, B.S., The College of the City of New York; M.S., University of Pennsylvania.

Dissertation: "Nuclear Matrix Elements of Beta-Decay."

Cooper, Charles Dewey, B.S., Berry College; A.M., Duke University.

Dissertation: "Absorption Studies of Ortho, Meta and Para Xylene in the Near Ultra-violet and Corresponding Comparison with Disubstituted Benzenes."

Crabbe, George Francis, B.S., Geneva College; M.S., University of Michigan.

Dissertation: "An Investigation of Sulfur Dioxide by Means of a Stark Effect Microwave Spectrograph."

Cuculo, John Anthony, B.S., Brown University.

Dissertation: "The Direct Vapor Phase Fluorination of Acetonitrile."

Deener, David Russell, A.B., M.A., University of Pittsburgh.

Dissertation: "International Law and Practice in the Official Opinions of the United States Attorneys General."

Drennon, Herbert Neal, B.S., Mississippi State College; A.M., Vanderbilt University.

Dissertation: "The Industrial Relations Policy of the Canadian Dominion Government, 1939-1948."

Early, Benjamin W., A.B., A.M., University of Virginia.

Dissertation: "Southey's *Joan of Arc*: the Unpublished Manuscript, the First Edition, and a Study of the Later Revisions."

Eckert, Edward Arthur, A.B., Brooklyn College; M.S., Massachusetts Institute of Technology.

Dissertation: "Host Response to the Transmitting Factors of Avian Erythro-Myeloblastic Leucosis."

Eisenberg, Max Aaron, B.A., Brooklyn College; M.S., New York University.

Dissertation: "Studies on Pancreatic Proteases and Their Precursors, the Reversible Heat Denaturation of Chymotrypsinogen."

Farrell, Charles Ernest, A.B., Waynesburg College; A.M., University of Michigan.

Dissertation: "Studies on *Euschoengastia*, a Genus of Chigger Mites, of North America."

Friedman, Lorraine, B.A., University of Arkansas.

Dissertation: "Comparative Antigenic and Immunologic Studies on Blastomyces Dermatitis, the Cause of North American Blastomycosis, and Blastomyces Brasiliensis, the Cause of South American Blastomycosis."

Frostick, Frederick Charles, Jr., B.S., Duke University.

Dissertation: "Mechanisms for Condensations of Anhydrides and Ketones and of Ketone Enol Esters to Form B-Diketones by Boron Trifluoride."

Gesling, Martha Myra, A.B., Ohio Northern University; A.M., Ohio State University.

Dissertation: "Students' Ideas About Democracy in Grade 8, Grade 10, and Grade 12."

Good, Myron Lindsay, B.A., University of Buffalo.

Dissertation: "The Study of Beta and Gamma Radiation with a Scintillation Counter."

Grantham, R. Jack, B.Ed., Eastern Illinois State Teachers College.

Dissertation: "Synthesis of Fungicidal Compounds."

Hallow, William Charles, A.B., A.M., Lehigh University.

Dissertation: "Effects of Intravenous Sodium Amytal Medication on Rorschach Performance."

Hamrick, Emmett Willard, A.B., University of North Carolina.

Dissertation: "A New Study of the Ezra Problem."

Herbst, Robert Taylor, A.B., Duke University; M.S., North Carolina State College.

Dissertation: "Reduction of Passive Orthonomic Differential Systems to Passive Systems of the First Order."

Holt, Robert LeRoi, B.A., M.A., Wake Forest College.

Dissertation: "Christian Ethics in the Thought of Thomas Traherne."

Hopke, Ernest Rudolph, B.S., College of Charleston; A.M., Duke University.

Dissertation: "Studies on the Vapor Pressure Below 1 MM HG of Several Aromatic Compounds."

- Hosack, Robert Ewing, A.B., College of Wooster; A.M., University of Chicago.  
Dissertation: "Shantung: An Interpretation of a Chinese Province."
- Jennings, Charles Warren, B. of Eng., University of Toledo; M.S., University of California.  
Dissertation: "A Mechanism for the Self Discharge of the Leclanche Dry Cell."
- Johnson, Charles Minor, Jr., B.E. in C.E., Vanderbilt University.  
Dissertation: "Microwave Spectroscopy in the Region from Two to Three Millimeters."
- Johnson, Richard Stebbins, B.S., M.S., Illinois Institute of Technology.  
Dissertation: "The Reproducibility of the Manganese Dioxide Electrode with Alkaline Electrolytes."
- Judge, William Arthur, B.S., Loyola College.  
Dissertation: "The Mechanism of Certain Organic Elimination Reactions."
- Lancaster, Forrest Wesley, B.S., Purdue University.  
Dissertation: "Resonance Absorption Spectra of Paramagnetic Salts at Microwave Frequencies."
- Lavery, Carroll Dee, A.B., A.M., University of Colorado.  
Dissertation: "Science and Pseudo-Science in the Writings of Edgar Allan Poe."
- Leder, Irwin Gordon, A.B., Brooklyn College; M.S., New York University.  
Dissertation: "The Biological Synthesis of Pyridine Nucleotides."
- McCain, Paul Moffatt, B.A., Erskine College; A.M., Duke University.  
Dissertation: "The County Court in North Carolina Before 1750."
- McKinney, Gordon R., A.B., DePauw University; M.S., Notre Dame University.  
Dissertation: "An *in vitro* Study of the action of Various Drugs on Certain Phases of Tissue Anabolism."
- McMillan, John Johnson, B.A., Wake Forest College; A.M., Duke University.  
Dissertation: "The Relationship of an Aspect of Group Structure to Conformity of Individual Judgments."
- Meeks, Marion Littleton, B.S., M.S., Georgia School of Technology.  
Dissertation: "Electron-Neutrino Angular Correlation."
- Myers, Richard Harold, B.S., University of Virginia.  
Dissertation: "A Study of the Electric Moments of the Mono-Chloro Isomers of Benzotrifluoride, Benzotrichloride and Benzotribromide."
- Pierson, Robert Malcom, A.B., DePauw University; A.M., Duke University.  
Dissertation: "A Critical Study of Coventry Patmore's *The Unknown Eros*."
- Poteat, William Hardman, A.B., Oberlin College; B.D., Yale University.  
Dissertation: "Pascal's Conception of Man and Modern Sensibility."
- Ratchford, Charles Brice, B.S., M.S., North Carolina State College.  
Dissertation: "Rental Arrangements in a Developing Economy."
- Reynolds, George Arthur, B.S., University of Florida.  
Dissertation: "Factors Influencing Cyclizations in Quinoline and Naphthyridine Syntheses. Condensations of Nitriles to Form Dimers and Nitrogen Heterocycles."
- Rhodes, Daniel Durham, A.B., Davidson College; B.D., Louisville Presbyterian Theological Seminary.  
Dissertation: "The Struggle for Religious Liberty in Virginia, 1740-1802."
- Ross, William D., Jr., A.B., Millsaps College; A.M., Duke University.  
Dissertation: "Industrial Promotion by Southern States."
- Schafer, Thomas Anton, B.A., Maryville College; B.D., Louisville Presbyterian Theological Seminary.  
Dissertation: "The Concept of Being in the Thought of Jonathan Edwards."
- SeEVERS, Delmar Oswell, B.S., Duke University.  
Dissertation: "The Development of a Cloud-Ion Chamber and Its Application to a Study of the Secondary Particles of Cosmic Ray Stars."
- Shirey, W. Arthur, A.B., DePauw University; A.M., Indiana University.  
Dissertation: "A Comparison of the Social-Ethics Factors in Four Leading Senior High-School Sociology Textbooks with Those in the Sunday-School Literature for the Senior High-School Age Used in Leading Protestant Churches."
- Siddall, Thomas Henry, III, A.B., University of North Carolina; M.S., University of Chicago.  
Dissertation: "A Spectrophotometric Study of the Hydrolysis of Iron (III) Ion."
- Silva, Joseph Andres, B.S., Northwestern University.  
Dissertation: "Representation of Arithmetic Functions in GF [pn,x] with Values in an Arbitrary Field."
- Sisk, Glenn Nolen, A.B., A.M., University of Alabama.  
Dissertation: "Alabama Black Belt, A Social History, 1875-1917."
- Spencer, Stephen Marion, Jr., B.S., Wake Forest College; A.M., Duke University.  
Dissertation: "Transcendental Numbers Over Certain Function Fields."
- Thumm, Byron Ashley, B.S., Morris Harvey College.  
Dissertation: "Rate and Equilibrium Studies of Certain Reactions."
- Vonk, Paul Kenneth, A.B., Calvin College; A.M., University of Michigan.  
Dissertation: "The Concept of Divine Revelation in the Philosophy of Religion."



Wenger, Karl Frederick, B.S., University of Maine; M.F., Duke University.

Dissertation: "The Sprouting of Sweetgum in Relation to Season of Cutting and Carbohydrate Content."

Wiles, Charles Preston, B.A., Washington College, Md.; A.M., Duke University.

Dissertation: "A Historical Analysis and Appraisal of Bishop Lancelot Andrewes' Ecclesiology with Particular Reference to Predication and Priestly Office."

Williams, John Rodney, B.A., Lawrence College; A.M., Johns Hopkins University.

Dissertation: "The Conservative Party of Canada: 1920-1949."

#### HONORARY DEGREES

*Doctor of Letters*

Julian Parks Boyd

*Doctor of Laws*

Gordon Gray

*Doctor of Divinity*

Liston Corlando Pope

#### COMMISSIONS IN UNITED STATES NAVY AND UNITED STATES MARINE CORPS

##### Ensign, United States Navy

Adams, Morgan Rudolph, Jr.

Barnes, Wallace Ray

Bingman, Kenneth Ronald

Blaylock, Daniel Webster, II

Bukowitz, Marvin David

Calaway, Bill Edward

Carpenter, Harry Everett, Jr.

Chrisfield, Norman Edward

Colenda, Herbert Fentriss

Dorman, Charles Thomas

Dunham, Richard Marshall

Duttweiler, Charles

Eisenbrandt, Frederick Henry, Jr.

Fick, William George, Jr.

Gumkowski, Thaddeus Raymond

Hayes, Kendall Preston

Hogg, William James

Jones, Charles Albert

Katzenmeyer, William Gilbert

Lewis, Robert Dobbins

Maass, William Harold

Merritt, Glen Carl

Newman, Edmund Henry

Orr, Harry Allen, Jr.

Otis, George Leslie, Jr.

Putnam, John Graves, Jr.

Shulsinger, Joseph

Silkett, Robert Tillson

Slane, John Clark

Slone, Harry Lee

Snively, Lawrence White, Jr.

Treat, Charles William

Underwood, Jack Lawrence

Veith, Frank Herman, Jr.

Warmath, John Thomas, Jr.

Wile, Homer Wayne

Wilmer, William Blackiston, VI

Young, Robert Everett

Yourison, James Edward

##### Second Lieutenant, United States Marine Corps

Fry, John Sedgwick

Hudson, Isham Barney, Jr.

McMaster, Fitz-John Creighton

Rice, William Henry

Tapley, John Mark

Thigpen, Richard Elton, Jr.

#### COMMISSION OF SECOND LIEUTENANT, UNITED STATES AIR FORCE

Fenner, William Eaton

Kastrinelis, Peter L.

Kenaston, Robert Allen

MacDonald, Alan Gray

#### COMMISSION OF FIRST LIEUTENANT, MEDICAL CORPS, ARMY OF THE UNITED STATES

Horne, Francis Gregg

Parapid, Nicholas Vladimir

Williams, Harold Lee

Williams, Louis Howard

The following degrees were awarded September 1, 1950:

#### A.B. DEGREE

Allen, Joseph Land

Ancrum, Thomas Douglas

Ayers, John Clifford, Jr.

Batchelor, William Mac

Beam, Joe Cephas

Beaumont, Jacques Dudley

Brady, James Archibald, Jr.

Buchanan, Charles Edward

Burdick, Wallace T.

Campbell, Lucian Paul, Jr.

Carpenter, Grady Sherdale

Carswell, Abel Paul, Jr.

Cohen, Phin

Conner, Ellen Young

Cooper, Helen Janet

Corley, Donald George

Davis, James William

Dunphey, Everett Richard

Einbinder, Sidney

Freedman, Doris Jeanette

Freeland, James M. Jackson

Frischmann, Charles Peter

Garber, Mark Edward, Jr.

Gibson, James Edward, Jr.

Gibson, Robert Bruce

Glenn, Jean Claire

Gloves, Joseph A.

Goodwin, Donald C.

Haas, William Howard

Harris, Thomas Burrell

Hawkins, James Wendell

Herbin, Leonidas, Jr.

Hibbitts, Harold B.

Hunt, Lawrence Ellerbe

Hutson, Edward Douglas

Hutton, Jeanne Marie

Ira, Gordon Henry, Jr.

Jeske, John W., Jr.

Jones, Harvey Chester

Karl, Lawrence O., Jr.

Kirby, Jack O.

Knipmeyer, Arlie Charles

Lowe, Gentry Hearde, Jr.

McDaniel, Beverly Ann

McNeer, Fred Arnold, Jr.

Machek, Andrew

Martin, George Wilson  
 Mebane, Giles Yancy  
 Middleton, David John, Jr.  
 Milstead, William Malcolm  
 Moore, Elijah Francis, Jr.  
 Mousmoules, John A.  
 Moss, Blanche  
 Nelson, John Everett  
 Niemierzycki, Eugene John  
 Noggle, Burl Lee  
 Page, Jackie O'Neal  
 Parrish, Elbert Adrian  
 Past, Si Alexander, Jr.  
 Pierce, William Howard  
 Poindexter, Claibourne Worth  
 Porter, David Gordon, II  
 Price, Richard Glenn, Jr.  
 Ralph, Donald Barnes  
 Reed, Gordon Anthony  
 Rhodes, Wade McLean, Jr.

Ross, Joseph Alderman  
 Rowan, William Keenan  
 Slaney, James D.  
 Smith, Alton Battle  
 Smith, James Hadley  
 Smith, Lydia Allison  
 Spence, Talmage Tolly, Jr.  
 Stratton, John Thomas  
 Stribling, Charles S.  
 Sullivan, John Louis, Jr.  
 Temples, Charles William  
 Tyson, George H.  
 Wanzer, Sidney Hovey  
 Ward, John Amburn  
 Way, Charles Burr  
 Webster, William Frank, Jr.  
 Williamson, Lamont Wells  
 Woodworth, John Kennedy  
 Yevich, Eugene Edward  
 Young, Charles Denman

## B.S. DEGREE

Ahern, Edward F., Jr.  
 Arnold, Nina Dorris  
 Farquhar, Clyde Randolph

Hawes, Raymond Burke  
 Lee, Robert E., III  
 Yarnell, Richard Asa

## B.S. DEGREE IN NURSING EDUCATION

Galloway, Olive Valeria  
 Hagerty, Mary Louise Leffelman

Hale, Mary Badger  
 Mitchell, Margaret Elizabeth

## B.S. DEGREE IN MECHANICAL ENGINEERING

Miller, Marvin Vincent  
 Nuttle, Elbert Ray, Jr.

Steadman, Robert Harry

## DIPLOMA IN NURSING

Bating, Ernestine Malone

Reynolds, Violet Pierce

## B.S. IN NURSING

Reynolds, Violet Pierce

## M.ED. DEGREE

Blancett, Rhea Morgan  
 Gibson, Walter Van Buren  
 Harris, Emma Frances  
 Hendrickson, Clarence B., Jr.  
 Jessee, Dora

Noll, Robert Roscoe  
 Spear, Walter L.  
 Tefft, Edna Marian  
 Yeomans, Alice Virginia

## A.M. DEGREE

Cook, Francis K.  
 Corley, Gerald B.  
 Dail, Bernard Eugene  
 Dedmond, Francis Berneil  
 Drozdowski, Eugene  
 Gordon, Harold Dunbar  
 Grigg, Womble Quay, Jr.  
 Hart, Kathryn D.  
 Haywood, Charles Foster  
 Hill, Edward Hughes  
 Hoover, Basil  
 Hopkins, Adelene  
 Keyser, Stanley Randolph

McCoury, Phillip D.  
 Masters, Leon Raymond  
 Penninger, Elaine  
 Perrin, Edwin Noel  
 Pollock, Theodore Marvin  
 Rickey, Mary Ellen  
 Steel, James Richard, Jr.  
 Teer, Thomas Walter  
 Thiel, Goodrich August  
 Tumblin, John Addison, Jr.  
 Walters, Margaret Genevieve  
 Wilkinson, Edith Lewis  
 Wilkinson, Thomas Oberson

## HONORS AND PRIZES JUNE 4, 1951

*Summa cum laude*

Baldwin, William Lee  
 Quillian, Harriet Sandeford  
 Roth, Arnold Israel

Withers, Welty Kenney  
 Radner, Sanford Richard

*Magna cum laude*

Simmons, Bowen Eugene  
 Stringer, Arthur John, Jr.  
 Noell, Algernon Stanford, Jr.  
 Morse, Carolyn Beeson  
 Otis, George Leslie, Jr.  
 Hanser, Jana Lucille  
 Powers, Noyce Thompson  
 Martin, Norma Louise

Murdoch, Evelyn Janet Barbara  
 Bailey, Mary Catherine  
 Zioikowski, Theodore Joseph  
 Strickland, Elizabeth Wells  
 Blackburn, John Oliver  
 Binda, George Edward  
 Lee, John Marshall

## HONORS IN DEPARTMENTS AND SCHOOLS

## SCHOOL OF LAW

*Order of the Coif*

Hjaasens, Kermit Odel  
 McKinnon, Arnold Borden  
 Howe, William Bell White

Fleming, J. Carlton  
 Simmons, Roy Glen

## Graduated "With Distinction"

Hiaasen, Kermit Odel  
McKinnon, Arnold Borden  
Howe, William Bell White

Fleming, J. Carlton  
Simmons, Roy Glen

## Willis Smith Prize—Hiaasen, Kermit Odel

## SCHOOL OF MEDICINE—Election to Alpha Omega Alpha, Honorary Medical Fraternity

Agner, Roy Augusta, Jr.  
Conover, Raymond Everett  
Holland, Malvern Carlyle  
Jackson, Beverly Joy Neely  
Jackson, Murray Threadgill

Luzadre, John Hinkle  
Mandanis, John Peter  
Schnoor, Ernest Edgar  
Stanley, Gordon Douglas  
Walker, William Freeman

## TRINITY COLLEGE AND COLLEGE OF ENGINEERING

### Students listed according to average

#### Freshman Honors

Farrell, Thomas Edwin  
Kuritzky, Melvin Robert  
Givens, Dingess Monroe  
Johnston, John Devereaux, Jr.  
Stewart, Perry M.  
Beaty, Fred Donald

LeBauer, Sidney Irwin  
Kirby, Alfred Evison  
Chesnut, Donald Blair  
Holt, Joseph Whitsett  
Patrick, Roman Lee, Jr.  
Yancey, Henry Alexander, Jr.

#### Sophomore Honors

Brooks, Frederick Phillips, Jr.  
Germino, Dante Lee  
Sanders, Thomas Griffin  
Ritch, James Earle, Jr.  
Bush, Bobby Wesley  
Mylrea, Bruce William  
Curley, John Edward  
Wilkins, Burleigh Taylor  
Climenson, William Douglas  
Coppala, George Harrill  
Chapman, William Ennis, III  
Spivey, Robert Atwood

Erwin, Albert Rich  
Wright, William Vaughn  
Clark, Henry B., Jr.  
Watson, Charles Sullivan  
Abbot, George Richard  
Fisher, Robert Warren  
Turner, John Calhoun  
Padgett, Robert Louis  
Dewan, Edmond Maurice  
Sarles, Frederick William, Jr.  
Ferrin, Darwin Roland  
Tucker, Royster Milton

#### Junior Honors

Rusinow, Dennison Ivan  
Ballard, William Ed  
Noel, William Lee  
Hwang, Chester Fay  
Hutchin, Premysl Peter  
Howard, J. Woodford, Jr.  
Maddox, Houston Noble  
Fishburne, Charles Carrol  
Harvey, Frank Herbert

Stradley, Walter McNutt  
Hail, Joe James, Jr.  
Bodenhamer, David Lee  
Conti, Angelo Louis  
Bannister, Thomas Turpin  
Kime, Richard Charles  
Butler, William Warren  
Price, Robert McCullin  
Crawford, Marvel James, Jr.

## THE WOMAN'S COLLEGE

#### Freshman Honors

Gray, Aurelia Elizabeth  
Muse, Elizabeth Chadwick  
Demorest, Sallie Jane  
Knickerbocker, Fay Ann  
Kennedy, Margaret Huber  
Page, Nina Elizabeth  
Ritch, Julia Ann  
Skorvaga, Margaret Ann

Parker, Marcia Anne  
Roseborough, Virginia Lee  
Northington, Nancy Clark  
Olin, Alette Louise  
Kimball, Marolyn Coffin  
Lane, Barbara A.  
Flannery, Mary French  
Godard, Mary Grace

#### Sophomore Honors

Evans, Barbara Lee  
Divine, Elinor Faxon  
Watkins, Martha Jen  
Dawson, Mary Howland  
Young, Bettie Anne  
Lake, Eleanor Betty  
DePass, Nancy Witherspoon  
Cohon, Patricia Julia

Harter, Barbara Alice  
Glover, Frances Marie  
Gatsch, Marie  
White, Christina Catherine  
Sherertz, Margarita Park  
Levenson, Bernice  
Zanner, Genevieve Ellen  
Hughes, Ruth Hundley

#### Junior Honors

Pepper, Patricia  
Quareck, Ursula Carol'a  
Colledge, Lois June  
Tiller, Lucy Carroll  
Runyan, Nancy Louise  
Fairley, Nancy Elizabeth  
Price, Ann Ximena  
Goode, Jane Ann

Oliver, Joan Howard  
Purviance, Patricia Corrine  
Mader, Joan Maxine  
Andrews, Jane Raine  
Kohl, Margaret Valerie  
Beachley, Jo Ann  
Rose, Patricia Ann

# Roll of Students



## *Trinity College*

### FRESHMAN CLASS

Adamo, Kenneth Joseph  
Adams, John David  
Ailes, John Erwin  
Akins, John Edwin  
Alexander, Hobart L.  
Allen, John Jay  
Allred, Jeter Alexander  
Almeida, Fernando G.  
Amling, Richard Herbert  
Anderson, Herschel V.  
Arnold, Eugene Alanson  
Ashdown, Charles Edward  
Austin, William Tyler  
Bailey, Charles W.  
Bailey, Clarence Almon  
Bailey, James Wilson  
Bailey, William Raymond  
Baima, John A.  
Baker, Willard Freeman  
Baldwin, Bruce  
Bannon, Peter James  
Barger, Jerry H.  
Barker, Bradley Sinclair  
Barnes, Lee Gordon  
Barnes, William H.  
Barnhardt, Max L.  
Barnhill, Lamuel Edgar, Jr.  
Barr, Charles Robert  
Bairrett, David Wood  
Bartlett, William McGillivray  
Barton, Gerald  
Bataller, Bruce  
Bates, Walter Irving  
Baturin, Richard H.  
Bazemore, Charles William  
Beacham, Horace Edward, Jr.  
Beard, John Morace  
Beasley, John Austin, Jr.  
Beaty, Fred Donald  
Behnke, Raymond George  
Bell, Harry Bradford  
Beli, Luke Paul  
Bennett, Robert McArn  
Berlinghof, Peter  
Berry, Edward Lewis  
Biehl, Frederick Robert  
Biltz, Carl Nicholas  
Bird, Robert H.  
Bishop, Ted H.  
Bissette, Lester Cefare  
Black, Robert William, Jr.  
Blackley, Shem Kearney, Jr.  
Block, Norman Gregory  
Boatwright, Frank Boyce  
Bohbbitt, Ralph Lane, Jr.  
Boho, George Robert  
Bodden, Gerald Alston, Jr.  
Boling, Floyd Jackson, Jr.  
Bollinger, Richard Nexin  
Bondurant, Wesley Eugene  
Booth, Robert Harrison  
Borchardt, Charles Raymond

Pleasantville, N. J.  
Atlantic Beach, Fla.  
North Benton, Ohio  
Westwood, N. J.  
Long Island, N. Y.  
Wichita, Kan.  
Rockingham, N. C.  
Sao Paulo, Brazil  
Pana, Ill.  
Raleigh, N. C.  
Asheville, N. C.  
Malverne, N. Y.  
Jersey City, N. J.  
Durham, N. C.  
Selma, N. C.  
Coldspring, N. Y.  
Mt. Airy, N. C.  
Ramsey, N. J.  
Easton, Pa.  
Largo, Fla.  
Glen Rock, N. J.  
Salisbury, N. C.  
Wolfboro, N. H.  
Dobbs Ferry, N. Y.  
Winnetka, Ill.  
Durham, N. C.  
Bethel, N. C.  
Wallingsford, Pa.  
Nellysford, Va.  
Rockford, Ill.  
Riverdale, N. Y.  
Ridgewood, N. J.  
Meadville, Pa.  
Washington, D. C.  
Merion, Pa.  
Palm Beach, Fla.  
Daytona Beach, Fla.  
Southern Pines, N. C.  
Belmont, N. C.  
Morristown, N. J.  
Beaver Falls, Pa.  
Loris, S. C.  
Cheraw, S. C.  
Baltimore, Md.  
Durham, N. C.  
New Rochelle, N. Y.  
Cincinnati, Ohio  
Providence, R. I.  
Princeton, W. Va.  
Bailey, N. C.  
Durham, N. C.  
Shelby, N. C.  
South Norwalk, Conn.  
Ridge Spring, S. C.  
Rocky Mount, N. C.  
Grove City, Tenn.  
Port Arthur, Texas  
Siler City, N. C.  
Baltimore, Md.  
Reidsville, N. C.  
Washington, D. C.  
Charleston, W. Va.

Boshamer, Henry Carlisle  
 Botnick, Robert Stanley  
 Bowen, Joseph A.  
 Bowman, Keith Brown  
 Boylston, Ben Calvin  
 Bozzelli, James Fox  
 Bradshaw, Robert Wallace, Jr.  
 Bradt, Jim Lewis  
 Bragg, Albert Forsey  
 Brannon, Robert Mitchell  
 Branscombe, Paul Boyd  
 Brennan, David Richard  
 Brenner, Morgan Gipe  
 Brown, Charles Shugart  
 Brown, David Charles  
 Brown, Donald Gannon  
 Brown, Edgar Barry  
 Brown, James Paul  
 Brown, Robert Marchant  
 Bryant, William Franklin, Jr.  
 Buckley, Richard Robert  
 Bunn, Joe Plummer  
 Burrows, Bobby Lee  
 Bitters, John Thomas, Jr.  
 Cahill, Richard Walter  
 Cain, Paul Ricks  
 Calleson, Donald Amos  
 Calleson, Gerald Charles  
 Camacho, Fernando  
 Campbell, Leslie Curtis  
 Carpenter, Ralph George  
 Carter, Howard Robinsin  
 Castiglia, Thomas Benjamin  
 Cauthen, Frank M.  
 Cederstrom, James Curtiss  
 Chace, James Dutton  
 Chance, Donald R.  
 Chaplin, Stanley Winfield  
 Chapman, Edwin Ernest, Jr.  
 Chesnut, Don Blair  
 Chesson, Leslie Foy  
 Chun, Robert Jenguen  
 Ciminello, Vito  
 Clapp, Gordon William  
 Clapp, James Robert  
 Clark, Alan Francis  
 Clements, James Olin, Jr.  
 Clifton, Larry Daniel  
 Coggeshall, Albert Parrott  
 Coffin, E. F.  
 Cole, A. T., Jr.  
 Cole, James Leo  
 Collins, Bob McManus  
 Collins, Daniel Thomas  
 Collins, Harley G.  
 Collyer, George Stanley  
 Combes, George L.  
 Conner, W. Alvin Fletcher, Jr.  
 Conners, Edward Patrick  
 Conway, Paul Blackwell  
 Cooley, Charles Hubert  
 Cooper, Jack Painter  
 Corbett, William P.  
 Cordes, William Frederick  
 Corey, Andrew Vose  
 Coward, Alton A., Jr.  
 Cox, Jerry Vernon  
 Crady, Baraket Abraham  
 Cranwell, James L., Jr.  
 Crawford, Ted Robert  
 Creech, Harlan Longstreet, III  
 Crockett, David French  
 Crow, Earl Pickett, Jr.  
 Cruz, Ricardo Lebron  
 Cummins, Hugh Sterling  
 Cunningham, Charles  
 Cunningham, Wayne Ambler  
 Collins, John Joseph  
 Curry, Robert William  
 Czyz, R. W.  
 Dahl, Doring Grary

Gastonia, N. C.  
 Hattiesburg, Miss.  
 Louisville, Ky.  
 Greensboro, N. C.  
 Norfolk, Va.  
 Havertown, Pa.  
 Wilson, N. C.  
 St. Louis, Mo.  
 High Point, N. C.  
 Birmingham, Ala.  
 Toronto, Canada  
 Arlington, Va.  
 York, Pa.  
 War, W. Va.  
 Henderson, N. C.  
 Williamson, W. Va.  
 Brooklyn, N. Y.  
 Bridgeton, N. C.  
 Glen Rock, N. J.  
 Charlotte, N. C.  
 Charleston, W. Va.  
 Tarboro, N. C.  
 Asheboro, N. C.  
 Wilmington, N. C.  
 Litchfield, Conn.  
 Macon, Ga.  
 Merrick, N. Y.  
 Merrick, N. Y.  
 Bogota, Colombia, S. A.  
 West Point, Miss.  
 Wolfboro, N. H.  
 Lake Charles, La.  
 Tampa, Fla.  
 Roanoke, Fla.  
 Pittsfield, Mass.  
 Rochester, N. Y.  
 Hillsboro, N. C.  
 Keene, N. H.  
 Burlington, N. C.  
 Cedarville, Ohio  
 Durham, N. C.  
 Oakland, Calif.  
 Passaic, N. J.  
 Swampscott, Mass.  
 Siler City, N. C.  
 Havertown, Pa.  
 Daytona Beach, Fla.  
 Daytona Beach, Fla.  
 Darlington, S. C.  
 Amityville, N. Y.  
 Deland, Fla.  
 Rockingham, N. C.  
 Hillsboro, N. C.  
 Jackson Heights, N. Y.  
 Miami, Fla.  
 Fort Wayne, Ind.  
 Rockville Centre, N. Y.  
 Roanoke, Va.  
 Rahway, N. J.  
 Greenville, N. C.  
 Charlotte, N. C.  
 Riverside, N. C.  
 Wilmington, N. C.  
 Tuckahoe, N. Y.  
 Philadelphia, Pa.  
 Jacksonville, Fla.  
 Homestead, Fla.  
 Jacksonville, Fla.  
 Pittsburgh, Pa.  
 Jamaica, N. Y.  
 Asheboro, N. C.  
 Wynnwood, Pa.  
 Atlanta, Ga.  
 Rio Piedras, P. R.  
 Canonsburg, Pa.  
 Patrick Springs, Va.  
 Abington, Pa.  
 Thomasville, Ga.  
 Lynbrook, N. Y.  
 Durham, N. C.  
 Downers Grove, Ill.



- Daley, John Walter, Jr.  
 Dalton, Carson Elwood  
 Dalton, William Lee  
 Davidson, Tarver W.  
 Davis, Boyce Henry  
 Davis, Norman Warren  
 Davis, Thomas Edward  
 Dawson, George H.  
 Decker, Marvin Clement  
 de Laske, Donald  
 Delbos, George A., Jr.  
 D'Emilio, Rudolph John  
 Derick, Kenneth Colison  
 Delvin, Martin P., III  
 Diana, Dorinick Peter  
 Dickenson, Charles Ellington, Jr.  
 Dickman, Henry Joseph, Jr.  
 Dietze, Robert John  
 Dillon, Noel P.  
 Dimlich, John N.  
 Dobbs, Stuart  
 Doebler, John Willard  
 Douglas, Bryce  
 Dowling, John Kingsley  
 Driesell, Charles Grice  
 Duke, Davis Welby  
 Dulin, Thomas Leroy  
 Duys, Joseph Carter  
 Earnhardt, Harold Clark  
 Edmunds, John William  
 Edwards, Willard Lee  
 Eisinger, John Overton  
 Elliott, Harold H.  
 Ellis, James Blair  
 Else, Fred Hemenway  
 Enelow, Michael James  
 Fairley, Archie Blair  
 Farber, James P.  
 Farmer, Frederick Chatman  
 Farrell, Thomas Edwin  
 Featherston, John Eugene  
 Ferrin, Darwin Roland  
 Ferry, Roy John  
 Fesperman, George Milton  
 Fesperman, W. Rowe, Jr.  
 Fike, Francis George  
 Finkelstein, Nathan  
 Finlay, Bob Hart  
 Fischer, George I.  
 Fisher, Alexander Metcalf, Jr.  
 Fitch, Lewis Thomas  
 Fitchett, Frank Edward  
 Fitzgerald, Grayson Goode  
 Flora, Jerry Lee  
 Francis, Walter McIntyre, III  
 Freeze, George Kenneth  
 Freund, Curtis A.  
 Friedlander, Jack Ira  
 Friedlander, Robert  
 Frymark, Herbert Francis  
 Fulginiti, Salvatore Anthony  
 Fuller, Fred W.  
 Fuller, Gerald William  
 Fullerton, Samuel Baker, Jr.  
 Fulton, James Walker  
 Furr, William Hal  
 Gabler, E. Richard  
 Gachet, Fred Smith, Jr.  
 Galloway, Jimmie Dale  
 Garber, Meyer  
 Gardner, Robert E.  
 Garrett, Edward Gordon  
 Geozhegan, James C.  
 Gerber, George Carl  
 Gerhardt, William R., Jr.  
 Gibbons, Gerald Robert  
 Gilbert, Ernest Penn  
 Gilliland, Jack K.  
 Gillis, Harry George  
 Givens, Dingess Monroe  
 Glanzer, Charles Elliot  
 Wilton, N. H.  
 Verona, N. J.  
 Bethesda, Md.  
 Swannanoa, N. C.  
 Selma, N. C.  
 North Augusta, S. C.  
 Newark, Del.  
 Philadelphia, Pa.  
 Bloomfield, N. J.  
 Washington, D. C.  
 Buzzards Bay, Mass.  
 Philadelphia, Pa.  
 Hartford, Conn.  
 Trenton, N. J.  
 Middletown, N. Y.  
 Roanoke, Va.  
 Crescent Beach, S. C.  
 Verona, N. J.  
 East Hampton, N. Y.  
 Cleveland, Ohio  
 Springfield, Ill.  
 Great Neck, N. Y.  
 Jefferson, N. Y.  
 Jamestown, R. I.  
 Norfolk, Va.  
 Alexandria, Va.  
 Charlotte, N. C.  
 Havana, Cuba  
 Goldhill, N. C.  
 Roanoke, Va.  
 Silver Spring, Md.  
 Bethesda, Md.  
 Glencoe, Ill.  
 Goldsboro, N. C.  
 Washington, D. C.  
 Rydal, Pa.  
 Raleigh, N. C.  
 St. Petersburg, Fla.  
 High Point, N. C.  
 Sanford, N. C.  
 Roxboro, N. C.  
 Durham, N. C.  
 Cambria Hts., L. I., N. Y.  
 Charlotte, N. C.  
 Asheville, N. C.  
 Rome, N. Y.  
 East Orange, N. J.  
 Ridgewood, N. J.  
 Mamaroneck, N. Y.  
 Bernardsville, N. J.  
 Charleston, S. C.  
 Hartsville, S. C.  
 Cheriton, Va.  
 Kingsport, Tenn.  
 Shrewsbury, N. J.  
 Charlotte, N. C.  
 New York, N. Y.  
 Moultrie, Ga.  
 Larchmont, N. Y.  
 River Forest, Ill.  
 Wildwood, N. J.  
 Durham, N. C.  
 Erie, Pa.  
 Warren, Ark.  
 Leesburg, Va.  
 Charlotte, N. C.  
 Chambersburg, Pa.  
 Lakeland, Fla.  
 Waynesville, N. C.  
 Atlanta, Ga.  
 Salisbury, N. C.  
 Albans, W. Va.  
 South Hill, Va.  
 Arlington, Va.  
 Webster Groves, Mo.  
 Ridgewood, N. J.  
 Daytona Beach, Fla.  
 Charlotte, N. C.  
 Scarsdale, N. Y.  
 Pearisburg, Va.  
 New York, N. Y.

Glass, James Fuller, Jr.  
 Good, Louis Dean  
 Goodman, William Francis  
 Goodson, Clay Maurice  
 Goubert, Peter Auton  
 Green, Winship Iddings, Jr.  
 Greene, Montgomery A.  
 Greene, Walter Eastburn  
 Greenglass, Herman  
 Greeson, Robert William  
 Griffin, Ashton Thomas  
 Griffin, Elbert C.  
 Grigg, William Humphrey  
 Grimes, Charles Wesley  
 Guenther, John Hendel  
 Guion, John Walker  
 Gullidge, James L.  
 Guy, Robert George  
 Hadley, Hunter B., Jr.  
 Hahn, Philip Maxwell  
 Hall, Raymond Artie  
 Hall, Vincent Thomas  
 Hames, William Moor, Jr.  
 Hamilton, John Colvin  
 Hamrick, Harvey Bly  
 Hancock, Donald Fred  
 Hannel, Earle Yuhl  
 Hanner, Terrence Edward  
 Hardison, Joe Hammond  
 Hardon, Clayton Thomas  
 Hargitt, Thomas George  
 Hargraves, William Pearce, Jr.  
 Harmount, Thomas Herbert  
 Harms, William F.  
 Harp, James R.  
 Harper, Andrew Naudain  
 Harrison, Charles Richard  
 Haterius, Carl Joseph  
 Hawkins, Ronald Harris  
 Hawthorne, Charles Herbert  
 Healey, Burke  
 Healey, Joseph Henry  
 Heffron, Howard Cagwin  
 Hazel, Gerard B.  
 Hensley, Wayne Fortune  
 Hoppenstall, Walter Leonard, Jr.  
 Herring, Wilborn Moya  
 Hillsley, Theodore Miller, III  
 Hite, Eddie Donald  
 Hobby, Wensley  
 Hoffman, Larry William  
 Hoffman, Theodore  
 Hohlstein, William Kyrt  
 Holland, Roy Calvin  
 Holloman, Richard Vann  
 Holmes, Arthur James  
 Holmes, William Ellsworth  
 Holt, Joe Whitsett  
 Holt, Roy Ray, Jr.  
 Honaker, Robert Wirt, III  
 Honore, Tom Michael  
 Honsinger, Robert William  
 Hood, Richard Baxter  
 Hooper, Sam Terrell  
 Hoppe, Richard D.  
 Horton, James Courtney  
 Horton, Joe Von  
 Hubbard, Milton P.  
 Hudson, Milton LeRoy  
 Hull, George Theodore, Jr.  
 Hunt, Donald Frost  
 Hunter, James J.  
 Hunter, Richard Lewis  
 Huntsman, Paul Aldrich, Jr.  
 Ice, David Lee  
 Jaces, Albert L.  
 Jack, Bernard Roy  
 Jackson, Albert Charles, Jr.  
 James, Frederic, Jr.  
 Janicki, Bernard A.  
 Jennings, William H., Jr.  
 Durham, N. C.  
 Texarkana, Texas  
 Snow Hill, Md.  
 Winston-Salem, N. C.  
 Englewood, N. J.  
 Silver Spring, Md.  
 Kansas City, Mo.  
 Philadelphia, Pa.  
 Miami Beach, Fla.  
 Greensboro, N. C.  
 Goldsboro, N. C.  
 Monroe, N. C.  
 Albemarle, N. C.  
 Horse Shoe, N. C.  
 Reading, Pa.  
 Charlotte, N. C.  
 Albemarle, N. C.  
 Amherst, N. Y.  
 Monroe, N. C.  
 Forest Hills, N. Y.  
 Youngstown, Ohio  
 Coral Gables, Fla.  
 Birmingham, Ala.  
 Alexandria, Va.  
 Boiling Springs, N. C.  
 Orion, Ill.  
 Buffalo, N. Y.  
 Asheville, N. C.  
 Raleigh, N. C.  
 Longmeadow, Mass.  
 Durham, N. C.  
 Clearwater, Fla.  
 Parma, Ohio  
 Jeannette, Pa.  
 Pikeville, Ky.  
 Asheville, N. C.  
 Salem, Mass.  
 Newton Highlands, Mass.  
 Durham, N. C.  
 Taveres, Fla.  
 Ponca City, Okla.  
 Bloomfield, N. J.  
 Adrian, Mich.  
 New York, N. Y.  
 Asheville, N. C.  
 Wynnewood, Pa.  
 Wilson, N. C.  
 Philadelphia, Pa.  
 Alexandria, Va.  
 Swainsboro, Ga.  
 Franklin, Pa.  
 Dunbar, W. Va.  
 Rutherford, N. J.  
 Raleigh, N. C.  
 Ahsokie, N. C.  
 Colmar, Pa.  
 Brooklyn, N. Y.  
 Sumter, S. C.  
 Albemarle, N. C.  
 Arlington, Va.  
 Martinsville, Va.  
 East Orange, N. J.  
 Hightstown, N. J.  
 Durham, N. C.  
 Toledo, Ohio  
 Mt. Sterling, Ky.  
 Richlands, Va.  
 Stedman, N. C.  
 Jacksonville, Fla.  
 Pompano Beach, Fla.  
 Pittsfield, Mass.  
 Valley Stream, N. Y.  
 East Orange, N. J.  
 Rumson, N. J.  
 Elkins, W. Va.  
 Cleveland Heights, Ohio  
 Leechburg, Pa.  
 Jasper, Ala.  
 Wynnewood, Pa.  
 Ambridge, Pa.  
 Berwyn, Ill.

- Johnson, Edmond H.  
 Johnson, Herbert Fraser  
 Johnson, Hugh Richard  
 Johnson, James Russell, Jr.  
 Johnson, Robert Harvey, Jr.  
 Johnston, John Devereaux, Jr.  
 Johnston, LeRoy Orlan  
 Jones, Edwin Krieger  
 Jones, John Donald, Jr.  
 Jones, William Osborne  
 Jordan, Thomas Dietrich  
 Justus, Drayton Ray, Jr.  
 Kallostian, Diran Mike  
 Karpman, Steve B.  
 Kaufman, William B.  
 Kaye, Lewis Alan  
 Keever, Eugene Roger  
 Keith, Edward Melvin  
 Kelly, Lawrence Cornelius  
 Kennedy, Frederick James  
 Kerby, Alfred Evison  
 King, Carl Howie, Jr.  
 King, James Edward  
 King, Robert Cannon  
 Kistler, Henry Evans, Jr.  
 Kistler, John Denglen  
 Klein, Arthur Jerome  
 Knight, Warren Lee  
 Kozma, Alex Jess  
 Kuehn, Edward Andrew  
 Kuritzky, Melvin Robert  
 Lacy, Clayton Rudolph  
 Lagergren, John David  
 Lambert, Boyd Lee  
 Lander, Henry, Jr.  
 Landon, William Curtis  
 Lauber, Raymond Clarence  
 Lauler, Robert Allen  
 Lavie, Henrique Jose  
 Lawson, Donald Victor  
 Lawther, John Wheeler  
 LeBauer, Sidney Irwin  
 Leggio, Anthony Joseph  
 Leibfried, Warren Paul  
 Lemrow, Edward, Jr.  
 Lens, Eugene E.  
 Leventis, Peter James  
 Lewis, Ovid Cogdell  
 Lewis, Thomas Murray  
 Liatti, Lloyd Allen  
 Liddon, James Flint  
 Ligon, Melvin E.  
 Linden, Paul Richard  
 Little, Richard A.  
 Little, Robert William  
 Littler, Theodore Coltrane  
 Lloyd, Delona  
 Lloyd, James Ronald  
 Long, Sherman E., Jr.  
 Louis-Dreyfus, William Gerard  
 Lowe, William Emory  
 Lowndes, William S.  
 Lownsbury, Robert Barber  
 Lucey, Paul Edward  
 Lupton, James Harold  
 Lynch, Albert Vanstory  
 Lynn, Charles Gordon  
 Lyon, G. L., Jr.  
 McCall, James Arthur  
 McClellan, Marion Matthews, Jr.  
 McCoy, Frank Taft  
 McCracken, Clayton Houston, Jr.  
 McGarry, Peter Michael  
 McGaughey, John Ellsworth  
 McGraw, Wesley Allen  
 McGuinn, John William, Jr.  
 McLellan, George Edward  
 McMillan, Robert Carl  
 McRoy, William D., Jr.  
 McTammey, Daniel John  
 MacDermid, John Thomas  
 Ocean City, Md.  
 Tampa, Fla.  
 Columbia, Miss.  
 Fayetteville, N. C.  
 Princess Anne, Md.  
 Asheville, N. C.  
 Indianapolis, Ind.  
 Harrisburg, Pa.  
 Charleston, W. Va.  
 Henderson, N. C.  
 Great Neck, N. Y.  
 Hendersonville, N. C.  
 New York, N. Y.  
 Washington, D. C.  
 Maywood, N. J.  
 New Rochelle, N. Y.  
 Kannapolis, N. C.  
 Hanover, Pa.  
 Westfield, N. J.  
 Mobile, Ala.  
 Hampton, Va.  
 Salisbury, N. C.  
 Carlisle, Pa.  
 Delmar, Del.  
 Charlotte, N. C.  
 Ardmore, Pa.  
 Brooklyn, N. Y.  
 Monroe, N. C.  
 Springdale, Pa.  
 Toledo, Ohio  
 Peekskill, N. Y.  
 Roanoke, Va.  
 Nutley, N. J.  
 Albemarle, N. C.  
 Caracas, Venezuela  
 Durham, N. C.  
 West Haven, Conn.  
 New Orleans, La.  
 Caracas, Venezuela  
 Philadelphia, Pa.  
 Bethesda, Md.  
 Greensboro, N. C.  
 Woodhaven, N. Y.  
 Roslyn, L. I., N. Y.  
 West Palm Beach, Fla.  
 Brunswick, N. J.  
 Gastonia, N. C.  
 East Orange, N. J.  
 Fairmont, N. C.  
 Cleveland, Ohio  
 Yazoo City, Miss.  
 Durham, N. C.  
 Moline, Ill.  
 Palmyra, N. J.  
 Staunton, Va.  
 Manlius, N. Y.  
 Durham, N. C.  
 Durham, N. C.  
 Durham, N. C.  
 New York, N. Y.  
 Staten Island, N. Y.  
 Durham, N. C.  
 Perrysburg, Ohio  
 Waltham, Mass.  
 Belhaven, N. C.  
 Baltimore, Md.  
 Garden City, N. Y.  
 Durham, N. C.  
 Cazenovia, N. Y.  
 Thomaston, Ga.  
 Salisbury, N. C.  
 Asheville, N. C.  
 St. Petersburg, Fla.  
 Lawrenceville, Ill.  
 Cumberland, Md.  
 High Point, N. C.  
 Uniontown, Pa.  
 Marston, Miss.  
 Goldsboro, N. C.  
 West Conshohocken, Pa.  
 Terryville, Conn.

MacQueen, Kenneth Henry  
Maddox, Carl Owen  
Maddox, William Notley, Jr.  
Magaw, Milo E.  
Magidoff, Jerome  
Majors, Walter Ray  
Malone, John William  
Manning, George Kenneth  
Mapleton, Felix A.  
Marks, Jack Henry  
Marsden, George Wilnot  
Marshall, Robert Denkmann  
Martin, Posey L.  
Mason, Charlie Cromwell  
Mason, Dean Towle  
Matheson, Frank P.  
Mathies, Blair Henry  
Matthews, David Robert  
Matthews, Robert Lee  
Mattocks, Gary Bizzette  
Max, Allen A.  
Mayer, Robert Andrew  
Meadows, Edward Allen  
Meek, Charles Robert  
Melville, Noel  
Metropol, Jimmy Jack  
Meyer, Richard Arlen  
Michael, Robert Arnold  
Millenson, John Rodney  
Miller, A. Stanley, Jr.  
Miller, Guy Frederick  
Miller, John Howard  
Miller, Macon Patterson, Jr.  
Million, Eugene Smith  
Molina y Vedia, Marcelo A.  
Moon, Opal Henry  
Moore, Ted Lewis  
Morton, Jack  
Motlow, Theodore Elliott  
Mueser, Robert Ranson  
Mullen, Eugene Cooper  
Murray, James Philip  
Nance, Earl Walton  
Naomi, Tom, Jr.  
Nash, Charles Wesley  
Neal, William Weaver, III  
Needham, Edwin Garber  
Neely, John Starr  
Neely, Robert P.  
Nehrig, Harry Meade  
Nelson, Courtney Byrd  
Nessen, Newell John  
Neuhaus, Francis Clemens  
Noel, W. W., Jr.  
Northrop, Richard Armstrong  
Novak, Charles F.  
Oakley, Thomas Allison  
O'Brien, Kenan  
O'Mansky, Boris Louis  
Onderdonk, John Clarke  
Orr, Kenneth B.  
Osborn, Paul Albert  
Osborne, Heber Burton, Jr.  
Osorio, Hector M.  
Pagter, Ralph Gibson  
Palatine, Richard Louis  
Palmer, J. E., Jr.  
Pantelakos, Constantine G.  
Paris, Ernest Ralph, Jr.  
Parker, Paul C.  
Parr, Bobby Lee  
Paschal, Jerry Drew  
Patrick, Roman Lee, Jr.  
Patsch, Arthur Vernon, Jr.  
Patty, William Henry  
Perkins, Henry T.  
Perkins, Robert E.  
Perlov, Alexander K.  
Perry, Thomas Edwin  
Peters, Thomas  
Pierce, George W., Jr.

Birmingham, Mich.  
Lynchburg, Va.  
Whitesboro, N. Y.  
Oregon, Ill.  
Brooklyn, N. Y.  
West Palm Beach, Fla.  
Macon, Ga.  
LaGrange, N. C.  
Miami, Fla.  
Memphis, Tenn.  
New Rochelle, N. Y.  
Beverly Hills, Calif.  
Greensboro, N. C.  
Thomasville, N. C.  
Bethesda, Md.  
Robbinsville, N. J.  
Lindenhurst, N. Y.  
Durham, N. C.  
Rockaway, N. J.  
Southern Pines, N. C.  
Irvington, N. J.  
Charlotte, N. C.  
Oxford, N. C.  
Scarsdale, N. Y.  
Grosse Pointe Park, Mich.  
Manning, S. C.  
Chicago, Ill.  
Springdale, Pa.  
Cumberland, Md.  
Belleville, N. J.  
Feura Bush, N. Y.  
Youngstown, Ohio  
Leaksville, N. C.  
Washington, D. C.  
Buenos Aires, Argentina  
Atlanta, Ga.  
Gastonia, N. C.  
Albemarle, N. C.  
Lexington, N. C.  
Mt. Kisco, N. Y.  
Kimpton, N. Y.  
Rockville Centre, N. Y.  
Rupert, W. Va.  
Asheville, N. C.  
Cocoa, Fla.  
Marion, N. C.  
Cliffside, N. C.  
Gastonia, N. C.  
Port Washington, N. Y.  
Patton, Pa.  
Tulsa, Okla.  
Springfield, Pa.  
Huntington, W. Va.  
Henderson, N. C.  
Hermon, N. Y.  
River Forest, Ill.  
Quincy, Ill.  
Edinboro, Pa.  
Leaksville, N. C.  
Englewood, N. J.  
Charlotte, N. C.  
Montclair, N. J.  
Washington, D. C.  
Caguas, P. R.  
Washington, D. C.  
Trenton, N. J.  
Lynchburg, Va.  
Rocky Mount, N. C.  
Atlanta, Ga.  
Rockville Centre, N. Y.  
Lexington, N. C.  
High Point, N. C.  
Engelhard, N. C.  
Lexington, N. C.  
Burlington, N. C.  
Durham, N. C.  
Winston-Salem, N. C.  
Silver Spring, Md.  
Daytona Beach, Fla.  
Dravosburg, Pa.  
Bethlehem, Pa.

- Pierson, Kirvan H., Jr.  
 Pitt, William Howard  
 Pitts, Charles O.  
 Plater, Joseph Rue  
 Poe, Edgar Allan  
 Poore, William Elwood  
 Pope, Calvin A.  
 Pope, Thomas Arnold  
 Poppenberg, John Roger  
 Pott, William Howard  
 Potter, William Stanley  
 Price, James Sterling  
 Price, Parham Thomas  
 Price, Richard Foard  
 Pride, Stanley Gene  
 Progler, Thomas Hayes  
 Puryear, John L., Jr.  
 Pyle, Jack L.  
 Rabin, C. Ronald  
 Rayb, Claude L., Jr.  
 Raimondo, Gregory F.  
 Randall, Robert Earl  
 Randle, Louis E.  
 Ray, Joe Byron  
 Redlock, Charles Kimball  
 Redwine, James D., Jr.  
 Reed, John Alton  
 Resseguie, Lewis D.  
 Rice, Charles Larry  
 Richardson, Donald John  
 Richardson, Henry Crommelin, Jr.  
 Ripper, Raymond, Jr.  
 Riquezes, Hector Jose  
 Roaman, Martin  
 Roberson, George Don  
 Roberts, John Edward  
 Roberts, William Carmel, Jr.  
 Rodio, Carmen John  
 Rosen, Robert Irwin  
 Rosenfeld, Robert Louis  
 Rosenkranz, Donald Ira  
 Roth, Alfred Donald  
 Roughton, Ralph Emerson  
 Rovegno, Donald Cowie  
 Rowell, Edward K.  
 Ruffy, Franklin G., Jr.  
 Rumbold, Dean Philip  
 Salazar, Oscar E.  
 Sams, Charles Marshall  
 Sanders, Robert R.  
 Scargle, John G.  
 Scheman, Robert Bernard  
 Scheider, Roy Ross  
 Schoeb, John William  
 Schock, Charles W.  
 Schreiner, Charles William  
 Schwarz, Robert Louis  
 Seesholts, Arnold W. O.  
 Semon, W. Peter, Jr.  
 Seymour, Edward James, Jr.  
 Shabel, Fred Alan  
 Shaffer, Fred W.  
 Shaw, William Lane  
 Shechan, John Charles  
 Sheffield, Karl S.  
 Sheirich, Kirk B.  
 Sherrill, Henry S.  
 Shiftet, Herbert B.  
 Shingleton, Hugh  
 Shrader, William R., Jr.  
 Shute, Joseph K.  
 Siler, Ivan Leon  
 Singletary, Richard Lewis  
 Slagle, William Dale  
 Smiley, Douglas F.  
 Smith, Bobby Wayne  
 Smith, Ed Robert  
 Smith, James  
 Smith, Joe Bennett, Jr.  
 Smith, Robert L.  
 Smith, Talbot Merton  
 Baltimore, Md.  
 Hertford, N. C.  
 Guantanamo Bay, Cuba  
 Milwaukee, Wis.  
 Fayetteville, N. C.  
 King of Prussia, Pa.  
 Durham, N. C.  
 Enfield, N. C.  
 Brooklyn, N. Y.  
 Stratford, Conn.  
 Henderson, N. C.  
 New York, N. Y.  
 Lynchburg, Va.  
 Phoenix, Md.  
 Tampa, Fla.  
 Clarksburg, W. Va.  
 South Boston, Va.  
 Maitland, Fla.  
 Jamaica, N. Y.  
 Hickory, N. C.  
 Bellmore, N. Y.  
 Elizabeth, N. J.  
 Indianapolis, Ind.  
 Dothan, Ala.  
 Statesville, N. C.  
 Lexington, N. C.  
 Washington, D. C.  
 Jackson Heights, N. Y.  
 Durham, N. C.  
 Syracuse, N. Y.  
 West Palm Beach, Fla.  
 Ridgewood, N. J.  
 Caracas, Venezuela  
 New York, N. Y.  
 Daytona Beach, Fla.  
 Durham, N. C.  
 Panama City, Fla.  
 Hammononton, N. J.  
 Rochester, N. Y.  
 Clayton, Mo.  
 Lakewood, N. J.  
 Yonkers, N. Y.  
 Sandersville, Ga.  
 San Bernardino, Calif.  
 Durham, N. C.  
 Kannapolis, N. C.  
 Willow Grove, Pa.  
 Caracas, Venezuela  
 Smyrna Beach, Fla.  
 McCormick, S. C.  
 Wenonah, N. J.  
 Brooklyn, N. Y.  
 Trenton, N. J.  
 Petersburg, Va.  
 Springfield, Ill.  
 Fayetteville, N. C.  
 Jamaica, N. Y.  
 West Palm Beach, Fla.  
 Manhasset, N. Y.  
 Monroe, La.  
 Union City, N. J.  
 Huntingdon, Pa.  
 Keene, N. H.  
 Johnstown, Pa.  
 Waynesboro, Va.  
 Reading, Pa.  
 Sherrill's Ford, N. C.  
 Brevard, N. C.  
 Wilson, N. C.  
 Roanoke, Va.  
 Monroe, N. C.  
 Greensboro, N. C.  
 Pelham, Ga.  
 Springfield, Ohio  
 San Marino, Calif.  
 Durham, N. C.  
 Siler City, N. C.  
 Winston-Salem, N. C.  
 Roanoke, Va.  
 Shaker Heights, Ohio  
 Durham, N. C.



Smith, William Gordon  
 Smith, William Herbert  
 Smith, William Jordan  
 Spalding, Donald Watson  
 Stark, Dwight Burton  
 Stauffer, Ronald Bryan  
 Steckler, Matthew  
 Steele, Robert L.  
 Stein, Charles A.  
 Stein, Gary S.  
 Stephens, Russell F.  
 Stephens, Sammy Council, Jr.  
 Stevens, Lester Leroy  
 Stevens, Stanley B.  
 Stewart, Perry M.  
 Stiles, Peter T.  
 Stokes, Deleon Edward  
 Stoll, Kenneth C.  
 Stone, Albert Earl  
 Stone, Joseph S.  
 Stone, Richard W.  
 Stop, Eystein Ansgar  
 Stout, Roger Wallis  
 Strang, Charles Ward  
 Strauss, Robert P.  
 Strickland, William R.  
 Sudduth, Robert Lee, III  
 Sumner, Lew E., Jr.  
 Sunfield, Alfred T.  
 Swain, Joe  
 Swope, Sidney M., Jr.  
 Sydenham, Ronald W.  
 Sykes, Zenas M., Jr.  
 Tarleton, Robert William  
 Tarr, Jack Albert  
 Taylor, Clifton L.  
 Taylor, Earl Aubrey  
 Taylor, G. Richard  
 Taylor, Robert Worth  
 Taylor, Ronald Wesley  
 Taylor, Thomas Sheldon  
 Temple, Alan H., Jr.  
 Thaubald, Edward John  
 Thomas, Edwin Roosevelt, Jr.  
 Thomas, Jerry Eugene  
 Thomas, John William, Jr.  
 Thomas, Larry DeWitt  
 Thomas, Robert William  
 Thompson, Emerson M., Jr.  
 Thompson, Sam B.  
 Togasaki, Shinobu  
 Tolley, John Alexander  
 Townsend, N. Benjamin  
 Trebus, Robert Stanley  
 Trimble, Thomas N.  
 Trollinger, Raymond Russell, Jr.  
 True, Joel Brundage, Jr.  
 Turner, Richard Brooks  
 Turner, Roger James  
 Ulsh, Richard O.  
 Umstead, Richard  
 Underberg, Alfred E.  
 Underwood, William Alfred  
 Van Zandt, Richard Dewitt  
 Veasey, Lee Garland, Jr.  
 Veile, Frederick Xavier, Jr.  
 Vick, Charles Booker  
 Vivona, Dominci Anthony  
 Vlahos, Michael E.  
 Waddell, Oliver Wendell  
 Waldrop, Peter Nelson  
 Walker, Douglas W.  
 Walske, Ron Gilmore  
 Ware, Richard Marshall  
 Wasselle, Gerard William  
 Waters, James Lawrence  
 Watson, Jordan Kimball  
 Weeks, Thomas Wallace  
 Weil, John Edward  
 Weil, Martin Lester  
 Welcome, Allan Tilford  
 Thomasville, N. C.  
 Clover, S. C.  
 Alexandria, Va.  
 Cranford, N. J.  
 Franklin, Ind.  
 Emmans, Pa.  
 New York, N. Y.  
 Rockingham, N. C.  
 Teaneck, N. J.  
 Irvington, N. J.  
 Hinsdale, Ill.  
 Dothan, Ala.  
 Durham, N. C.  
 Marcellus, N. Y.  
 Yellow Springs, Ohio  
 Jersey City, N. J.  
 Charlotte, N. C.  
 Valley City, N. D.  
 Chester, S. C.  
 Culver, Ind.  
 Woodside, N. Y.  
 Elverum, Norway  
 Ramsey, N. J.  
 Wantagh, N. Y.  
 Wynnewood, Pa.  
 Fayetteville, N. C.  
 Montgomery, Ala.  
 Fayetteville, N. C.  
 Miami, Ariz.  
 Asheville, N. C.  
 Orlando, Fla.  
 Ft. Leavenworth, Texas  
 Atlanta, Ga.  
 Jenkins, Ky.  
 Trenton, N. J.  
 Charlotte, N. C.  
 Tampa, Fla.  
 Miami, Fla.  
 Jenkintown, Pa.  
 Gloucester, Mass.  
 Cleveland, Ohio  
 Scarsdale, N. Y.  
 Elkins, W. Va.  
 St. Louis, Mo.  
 Winston-Salem, N. C.  
 Henderson, N. C.  
 Nelsonville, Ohio  
 Robins A. F. Base, Ga.  
 Burgaw, N. C.  
 Montgomery, Ala.  
 Berkeley, Calif.  
 Arlington, Va.  
 Charlotte, N. C.  
 Irvington, N. J.  
 Charlotte, N. C.  
 Burlington, N. C.  
 Miami Beach, Fla.  
 Scarsdale, N. Y.  
 Hartsdale, N. Y.  
 Durham, N. C.  
 Durham, N. C.  
 Tampa, Fla.  
 Asheboro, N. C.  
 Coral Gables, Fla.  
 Durham, N. C.  
 Fairlawn, N. J.  
 Seaboard, N. C.  
 Irvington, N. J.  
 Washington, D. C.  
 Falmouth, Ky.  
 Bryn Mawr, Pa.  
 W. Springfield, Mass.  
 Baltimore, Md.  
 Arlington, Va.  
 Queens Village, N. Y.  
 Pittsburgh, Pa.  
 Leicester, Mass.  
 Enfield, N. C.  
 Great Neck, N. Y.  
 Statesville, N. C.  
 Lee, Mass.

Wellons, William Holt  
 Werback, John Arthur  
 Wheeler, James Maxwell  
 Wiethe, Dale Richard  
 Wilhite, James Bibson  
 Wilkins, Willis Jarrell, Jr.  
 Williams, A. Clay  
 Williams, Otis Thurmand  
 Williams, R. II.  
 Williams, Richard Y.  
 Wilson, Frank Thomas  
 Wilson, Herbert J. F.  
 Wilson, Norman Jay  
 Wingerter, Ronald E.  
 Wise, Richard Tyson  
 Wiseman, Charles Eldon  
 Wolf, Lewis Randall  
 Wolfe, Duane Ted  
 Wolfe, Robert Vinson  
 Wood, Richard Walker  
 Woodard, Jay Westbrook  
 Wright, William Hennies  
 Wyly, James Randolph  
 Wysaud, Herbert Parsons  
 Yancey, Genry Alexander, Jr.  
 Yaple, Newell Holmes  
 Yarborough, Carol Michael  
 Yengst, William Carroll  
 Ziegler, Edward W.  
 Zollars, William Bill

Richmond, Va.  
 Garden City, N. Y.  
 Chautauqua, N. Y.  
 Cincinnati, Ohio  
 Paintsville, Ky.  
 Birmingham, Ala.  
 Belleville, Ill.  
 Winston-Salem, N. C.  
 Elon City, N. C.  
 Blytheville, Ark.  
 Marcellus, N. Y.  
 West Palm Beach, Fla.  
 Philadelphia, Pa.  
 West Orange, N. J.  
 Scarsdale, N. Y.  
 Nelsonville, Ohio  
 Philadelphia, Pa.  
 Durham, N. C.  
 Silver Spring, Md.  
 Durham, N. C.  
 Raleigh, N. C.  
 Toccoa, Ga.  
 Port Washington, N. Y.  
 Babylon, N. Y.  
 Charlotte, N. C.  
 Columbus, Ohio  
 Sanford, N. C.  
 Meadville, Pa.  
 Elmsford, N. Y.  
 Rio de Janeiro, Brazil

## SOPHOMORE CLASS

Abbott, George Richard  
 Accardo, Philip J.  
 Adams, Dan Gilbert  
 Adams, Joe Bill  
 Adams, Walter I.  
 Adams, Walter Leslie  
 Alan, Alan David  
 Alexander, Frank Hugh  
 Alexander, Lester P., Jr.  
 Allegood, Josephus J.  
 Allison, Harry R.  
 Allison, Ronald Eugene  
 Ammerman, Raymond P.  
 Anderson, Harry William, Jr.  
 Anderson, John B.  
 Anderson, William Heartly  
 Ansari, Mansour B.  
 Archambault, Paul Joseph  
 Ardizzone, R. M.  
 Armstrong, James Calvin  
 Aronberg, Harold  
 Ashe, James F.  
 Atkins, James Harrison  
 Baehr, Bruce Findlay  
 Baker, Charles Ernest  
 Barden, Lawrence E.  
 Barnes, Charles Haynes  
 Barnes, John H.  
 Bass, Robert Homer  
 Bauman, Lawrence A.  
 Bauman, Saul Richard  
 Baylin, Jack Lee  
 Beard, Cameron R.  
 Beauchef, William Del Pozo  
 Bedell, Richard F.  
 Belf, Robert Charles  
 Bell, George Copeland  
 Benda, George Michael  
 Benson, Bruce Welsh  
 Berger, Charles E.  
 Berger, Robert B.  
 Bernard, Harold, Jr.  
 Berney, Norman Adam  
 Bernstein, Eugene  
 Bickerton, William Rankin  
 Bintliff, Richard A.  
 Bishop, William Warren  
 Bissette, C. M.

Lewisburg, W. Va.  
 Torrington, Conn.  
 Waycross, Ga.  
 Waycross, Ga.  
 Durham, N. C.  
 Middletown, N. Y.  
 Miami Beach, Fla.  
 Charlotte, N. C.  
 New Orleans, La.  
 Greenville, N. C.  
 Asheville, N. C.  
 Shaker Heights, Ohio  
 Lakeland, Fla.  
 Houston, Texas  
 Cleveland, Ohio  
 Grosse Pointe, Mich.  
 Meshed, Iran  
 Baltimore, Md.  
 Choclad, Ohio  
 Parkersburg, W. Va.  
 Ashland, Ky.  
 Asheville, N. C.  
 Gastonia, N. C.  
 McKeesport, Pa.  
 Evanston, Ill.  
 Boone, N. C.  
 Louisville, Ky.  
 Lumberton, N. C.  
 Danville, Va.  
 Lookout Mountain, Tenn.  
 Memphis, Tenn.  
 Baltimore, Md.  
 Essex Falls, N. J.  
 Plainfield, N. J.  
 Scarsdale, N. Y.  
 Detroit, Mich.  
 Raleigh, N. C.  
 Arlington, Mass.  
 Dayton, Ohio  
 Naugatuck, Conn.  
 Coalgood, Ky.  
 Bridgeport, Conn.  
 New York, N. Y.  
 Baltimore, Md.  
 Kenmore, N. Y.  
 Houston, Texas  
 Durham, N. C.  
 Durham, N. C.

- Blanch, Charles K.  
 Bland, Biny Kay  
 Bausoe, James W.  
 Bogart, William Harry  
 Bonn, Carl Joseph  
 Bornheim, Ralph  
 Bouldin, Gene K.  
 Bourne, J. Philip  
 Bowles, Lawrence T.  
 Boyd, Melvin T.  
 Brooks, Eugene C., III  
 Brooks, Frederick P., Jr.  
 Brooks, Len H.  
 Brown, H. P.  
 Brown, Lawton Cater  
 Bryan, Roland H.  
 Buckley, Thomas Templeton  
 Burgess, Ben E.  
 Burrill, R. G.  
 Buschman, Theodore W., Jr.  
 Bush, Bobby Wesley  
 Bynum, Frank B., Jr.  
 Cain, Silas Winfield, Jr.  
 Calaway, Elbert K.  
 Cannon, Stanley Joel  
 Cardozo, Joseph Lopez, Jr.  
 Carey, John J.  
 Carnahan, John Anderson  
 Carson, David G.  
 Carter, John H.  
 Carver, George W.  
 Cashion, John T., Jr.  
 Castor, Donald F.  
 Cates, Billy Reeves  
 Cates, Jerry H.  
 Caudle, Lloyd C.  
 Chapman, William E., III  
 Chappell, James D.  
 Christy, Robert H.  
 Clark, C. Fred, Jr.  
 Clark, G. James  
 Clark, Henry B., II  
 Clatterbuck, Ronald Drewrey  
 Claxton, Richard A.  
 Clemson, D. Buckey  
 Clifton, Theodore E., Jr.  
 Clower, John Robbins, Jr.  
 Cole, John Owen  
 Cole, Thomas J.  
 Coleman, Robert A.  
 Cooke, Maxwell E.  
 Copses, George Steve  
 Cornell, Richard Paul  
 Crady, George Abraham  
 Crawford, Tommy York  
 Croxton, Hugh B.  
 Cummings, Alton T.  
 Curley, John E.  
 Dalton, R. E.  
 Darkis, Thomas Morris  
 Darling, Glenn A.  
 Davis, Robert Earl  
 Day, Jerry Donald  
 Dean, William H.  
 Deimling, Keston John, Jr.  
 Denny, Earl Rankin  
 Denuzio, Don M.  
 Detrich, Virgil D.  
 Dewan, Edmond M., Jr.  
 Diamond, Paul H.  
 Dickey, Carl Oyer, Jr.  
 Dinwoodie, John Franklin  
 Dodge, Paul G.  
 Donigan, William Leonard  
 Donnell, Robert Lee  
 Drew, Robert D.  
 Dufort, Robert H.  
 Duft, Harry W.  
 Duncan, Franklin Parker  
 Duncan, John Nelson, Jr.  
 Dunn, David O.  
 Rockford, Ill.  
 Durham, N. C.  
 Winter Park, Fla.  
 Elmira, N. Y.  
 Englewood, N. J.  
 Oak Hill, W. Va.  
 High Point, N. C.  
 Charleston, W. Va.  
 Garden City, N. Y.  
 Henderson, N. C.  
 Durham, N. C.  
 Greenvide, N. C.  
 Wilson, N. C.  
 Great Falls, Mont.  
 West Palm Beach, Fla.  
 Bayonne, N. J.  
 Washington, D. C.  
 Newton, N. C.  
 Ft. Lauderdale, Fla.  
 Alexandria, Va.  
 Lenoir, N. C.  
 Darlington, S. C.  
 Bel Air, Md.  
 Winston-Salem, N. C.  
 Miami, Fla.  
 Belleville, N. J.  
 Ft. Wayne, Ind.  
 Cleveland Heights, Ohio  
 Snyder, N. Y.  
 Milford, N. J.  
 Harbourton, N. J.  
 Ansted, W. Va.  
 Tampa, Fla.  
 Durham, N. C.  
 Richmond, Va.  
 Clemmons, N. C.  
 York, Pa.  
 Marshallville, Ga.  
 Andrews, N. C.  
 Mooresville, N. C.  
 Leesburg, Fla.  
 Reidsville, N. C.  
 Roanoke, Va.  
 Pittsburgh, Pa.  
 Baltimore, Md.  
 Centerville, Mass.  
 Gulfport, Miss.  
 Forest City, N. C.  
 Asheville, N. C.  
 Pottsville, Pa.  
 Sarasota, Fla.  
 Charlotte, N. C.  
 Atlanta, Ga.  
 Jacksonville, Fla.  
 Gastonia, N. C.  
 Greenville, S. C.  
 Asheboro, N. C.  
 Birmingham, Mich.  
 Winter Park, Fla.  
 Durham, N. C.  
 Cleveland Heights, Ohio  
 Mataoka, W. Va.  
 Charlotte, N. C.  
 Live Oak, Fla.  
 River Forest, Ill.  
 Louisville, Ky.  
 Louisville, Ky.  
 Snyder, Texas  
 Forest Hills, N. Y.  
 Cedarhurst, N. Y.  
 Toledo, Ohio  
 St. Petersburg, Fla.  
 Rochester, N. Y.  
 West Belman, N. Y.  
 Asheboro, N. C.  
 Old Greenwich, Conn.  
 Richmond, Va.  
 Ridgewood, N. J.  
 Greensboro, N. C.  
 Raleigh, N. C.  
 Charlotte, N. C.

Eanes, William T.  
 Earnest, William Lee  
 Earnhardt, Wiley J. P.  
 Eason, John Richard  
 Easterling, William Ewart  
 Eddy, James Rollins  
 Edney, James M.  
 Edwards, Frank Blodgett  
 Edwards, Geoffrey Bruce  
 Eder, Thomas David  
 Eudridge, William Butler  
 Ertley, Ronald David  
 Erwin, Albert Rick  
 Evans, Merie D., Jr.  
 Evans, Phillip W.  
 Fansier, Richard Eugene  
 Farley, Francis C., Jr.  
 Farmer, John William  
 Farquhar, William Edward  
 Farrington, John Kirby  
 Feild, Richard W.  
 Ferguson, John Beckett  
 Fickinger, Thomas E.  
 Field, Herbert C., III  
 Finch, Brown F.  
 Finley, Earl B., Jr.  
 Fisher, Robert Warren  
 Fleming, William McCurdy  
 Forster, Richard S.  
 Fowler, Gerard Stiles  
 Fox, George C., Jr.  
 Fox, Randolph Val  
 Fredericks, Richard Niel  
 Freeman, Francis  
 Friedman, J. R.  
 Gage, Gaston Hemphill  
 Gafrett, John W., III  
 Gatewood, Willard Badgette  
 Gehweiler, John Andrew, Jr.  
 Geiger, William Henry  
 Germino, Dante Lee  
 Getz, Robert S.  
 Gibbons, John David  
 Gilbert, Charles E.  
 Gilbert, Joseph Cortell  
 Gilmore, Charles Nelson  
 Glenn, Bruce Goodwin  
 Glenn, James H.  
 Goldstein, Garry Arnold  
 Goldstein, Harold M.  
 Goode, Guerry D.  
 Gordon, Bruce J.  
 Gordon, Jasper McCutchens, Jr.  
 Gorrell, Robert F.  
 Gould, Donald W.  
 Govan, Colin M.  
 Graham, Frank Richard  
 Grant, Truett A.  
 Graves, Charles Edward  
 Gray, Gene W.  
 Green, Ray Gardner, Jr.  
 Greenberg, Allen  
 Greene, John C.  
 Greenwald, Stuart Morris  
 Greer, Dewey Hobson, Jr.  
 Gregory, Bobbie L.  
 Grillo, Robert L.  
 Grinaker, Arne James  
 Groat, Dick Morrow  
 Gwinn, Charles Leslie  
 Gwynn, Paul A.  
 Haddad, Gilbert A.  
 Haislip, Donald Ray  
 Hall, Douglas C.  
 Hall, James Samuel, Jr.  
 Hall, Robert Rhett  
 Hall, Robert V.  
 Hamilton, James W.  
 Hanes, William P.  
 Hanner, Richard R.  
 Hansbarger, Luther Clark

Lexington, N. C.  
 Bethesda, Md.  
 Edenton, N. C.  
 Tampa, Fla.  
 Raleigh, N. C.  
 Collinsville, Conn.  
 Hendersonville, N. C.  
 Greenville, S. C.  
 Westfield, N. J.  
 Scotia, N. Y.  
 Burlington, N. C.  
 Kingston, Pa.  
 Concord, N. C.  
 Massillon, Ohio  
 Dover, Del.  
 Rocky River, Ohio  
 Charleston, W. Va.  
 Hendersonville, N. C.  
 Grosse Pointe, Mich.  
 Thomasville, N. C.  
 Baltimore, Md.  
 Groton, Mass.  
 Coudersport, Pa.  
 Martinsville, Va.  
 Thomasville, N. C.  
 Roanoke, Va.  
 Wauchula, Fla.  
 Philadelphia, Pa.  
 Washington, D. C.  
 Bronxville, N. Y.  
 Teaneck, N. J.  
 New Orleans, La.  
 Miami Beach, Fla.  
 Larchmont, N. Y.  
 Durham, N. C.  
 Charlotte, N. C.  
 Warrenton, N. C.  
 Pelham, N. C.  
 Jamaica, N. Y.  
 Leesburg, Fla.  
 Durham, N. C.  
 Brooklyn, N. C.  
 Maplewood, N. J.  
 Wilmington, N. C.  
 Havre de Grace, Md.  
 Belle Vernon, Pa.  
 Lexington, Ky.  
 Washington, D. C.  
 Norfolk, Va.  
 Atlanta, Ga.  
 St. Augustine, Fla.  
 Hamden, Conn.  
 Charlotte, N. C.  
 Greensboro, N. C.  
 Tampa, Fla.  
 Collingdale, Pa.  
 Charlotte, N. C.  
 High Point, N. C.  
 Staten Island, N. C.  
 Jasper, Ala.  
 Fayetteville, N. C.  
 Danville, Va.  
 Kansas City, Mo.  
 Middletown, N. Y.  
 High Point, N. C.  
 Detroit, Mich.  
 Fair Lawn, N. J.  
 St. Petersburg, Fla.  
 Pittsburgh, Pa.  
 Miami, Fla.  
 Clinton, Md.  
 Daytona Beach, Fla.  
 Rocky Mount, N. C.  
 Buffalo, N. Y.  
 Fayetteville, N. C.  
 Salisbury, N. C.  
 Salisbury, N. C.  
 Winter Park, Fla.  
 Walkertown, N. C.  
 Asheville, N. C.  
 Logan, W. Va.

Haskell, Weston W.  
 Hazel, Gerard B.  
 Hessler, William L.  
 Hathaway, Robert G.  
 Havens, Robert M.  
 Hayes, Daniel M., Jr.  
 Hayford, D. E.  
 Heath, Richard J.  
 Hedley, Gilbert Parsons  
 Heiney, John H.  
 Henry, Granville Conner, III  
 Herndon, William Wesley  
 Heslin, John Thomas  
 Hicks, Samuel A.  
 Higgins, Edward Alton  
 Hill, Boyd Howard  
 Hilliard, Roy C.  
 Hite, Charles L.  
 Hobbs, Russell George  
 Hobby, L. W.  
 Hodge, Hugh L.  
 Hodgins, John N.  
 Hoey, Henry Lewis  
 Hogus, David G.  
 Holben, Carl E.  
 Hollett, Alan Morton  
 Hollingsworth, David Thomas  
 Hollowell, James Curtis  
 Horner, Robert Bruce  
 Horton, Lawrence David  
 Hosier, Charles Taylor  
 Houk, J. Edwin  
 Houser, Roland B.  
 Howard, Clarence Edward  
 Howard, Henry duBignon  
 Howard, Robert M.  
 Howe, William A.  
 Howell, Donald S.  
 Howell, Eugene Davis  
 Howell, Ray Ronald  
 Hulbert, Kenneth M.  
 Hull, Robert Miller  
 Humphries, John O'Neal  
 Humphrey, Joseph W. H.  
 Hurst, David Eugene  
 Hurst, Lawrence Ronald  
 Hurst, Robert Grant, Jr.  
 Hutchin, Premysl Peter  
 Innes, Thomas Charles  
 Ira, Stewart B.  
 Jackson, Nelson Pointer  
 Jackson, Theodore H.  
 Jacobs, Roy M.  
 James, Charles H.  
 James, Walter Scott  
 Jarecki, Richard William  
 Jennings, Bruce Daniel  
 Jensen, Robert Leif  
 Jessup, Alvah D.  
 Johnson, Henry Allen  
 Johnson, Richard A.  
 Johnson, Richard Gibbs  
 Johnston, Hugh Wolfe  
 Jones, Grover Stephen  
 Jones, Robert W.  
 Jones, William H.  
 Jordan, Terrell F.  
 Joyner, George Richardson, Jr.  
 Judd, Arthur William  
 Katz, Stanley Ivan  
 Keller, Thomas F.  
 Kelley, George E.  
 Kennemore, Douglas Ervin  
 Kesler, William E.  
 Keziah, John W.  
 King, John Thomas  
 King, Joseph Edward  
 Kintz, George Jerry  
 Kitlowski, Edward John  
 Knight, Kinchen Coffield  
 Knotts, Clarence Cole, Jr.

Towaco, N. J.  
 New York, N. Y.  
 Shaker Heights, Ohio  
 Hartsdale, N. Y.  
 Miami, Fla.  
 Middletown, Conn.  
 Hopewell, Va.  
 Robinson, Ill.  
 Leonia, N. J.  
 New York, N. Y.  
 Decatur, Ga.  
 Milledgeville, Ga.  
 Durham, N. C.  
 Worcester, N. Y.  
 Framingham, Mass.  
 St. Petersburg, Fla.  
 Middlesex, N. C.  
 Henderson, N. C.  
 Wheeling, W. Va.  
 Atlanta, Ga.  
 Silver City, N. M.  
 Thomasville, N. C.  
 Faison, N. C.  
 Croton-on-Hudson, N. Y.  
 Zelienople, Pa.  
 Wilmington, Del.  
 Fayetteville, N. C.  
 Takoma Park, Md.  
 Malverne, L. I., N. Y.  
 Flemingsburg, Ky.  
 Suffolk, Va.  
 Rutherford College, N. C.  
 Leicester, N. C.  
 Clinton, N. C.  
 Savannah, Ga.  
 Savannah, Ga.  
 Pittsburgh, Pa.  
 Suffolk, Va.  
 Waynesville, N. C.  
 Poland, Ohio  
 Danbury, Conn.  
 Madison, N. J.  
 Columbia, S. C.  
 Ellwood City, Pa.  
 Middlesboro, Ky.  
 Matoaka, W. Va.  
 Durham, N. C.  
 Bruno, Czechoslovakia  
 Asheville, N. C.  
 Jacksonville, Fla.  
 Durham, N. C.  
 Cheltenham, Pa.  
 New York, N. Y.  
 Wildwood, N. J.  
 Waynesboro, Pa.  
 Asbury Park, N. J.  
 Laurens, S. C.  
 Staten Island, N. Y.  
 Glenbrook, Conn.  
 Weldon, N. C.  
 Dayton, Ohio  
 Washington, D. C.  
 Cramerton, N. C.  
 Hartsville, S. C.  
 Stamford, N. Y.  
 New Bern, N. C.  
 Atlanta, Ga.  
 Suffolk, Va.  
 Youngstown, Ohio  
 Baltimore, Md.  
 Greenwood, S. C.  
 Durham, N. C.  
 Greenville, S. C.  
 Fuquay Springs, N. C.  
 Burlington, N. C.  
 Gastonia, N. C.  
 Durham, N. C.  
 Kingston, Pa.  
 Baltimore, Md.  
 Whitakers, N. C.  
 Hamlet, N. C.



- Knowles, Francis, Jr.  
 Kramme, Gerald Andrew  
 LaCaruba, Chris  
 Lackey, Dixon A., Jr.  
 Lane, Henry Jackson, Jr.  
 Larsen, H. P.  
 Lassiter, Vernon Clarke, Jr.  
 Laurer, Donald Charles  
 Lawrence, James D.  
 Lea, William Paul, Jr.  
 Leach, George Carson  
 Lefler, B. W., Jr.  
 Lenox, George Arthur, III  
 Lerps, David Arthur  
 Lesneski, Richard Paul  
 Levergood, Charles Clyde  
 Levine, Jerome Ivan  
 Lewis, Joseph William, Jr.  
 Lineberger, Joe G.  
 Loane, Jabez W.  
 Logan, Jim M.  
 Looper, Charles B.  
 Lowndes, John Foy  
 Lucas, Jacklyn H.  
 Luce, William Marshall  
 Luck, Jean M.  
 McAdams, J. Richard  
 McCash, Thomas William  
 McClatchie, James Marsh  
 McCluskey, John Cullers  
 McCracken, William Tignal  
 McFarling, Harry Montgomery, Jr.  
 McLoney, Thorne Clay  
 Maddox, Clyde Overton  
 Mahdavi, Kazen  
 Marks, Dennis G.  
 Markwood, Paul W., Jr.  
 Marshall, Robert Edward  
 Martin, Charles Edward  
 Martin, David Cooper  
 Martin, Donald Francis  
 Massey, Henry Reese  
 Massey, James Andrew  
 Mathes, John Franklin  
 Matheson, Donald G.  
 Maus, Lewis McKinney  
 Means, R. E.  
 Mecartney, Bruce Wells  
 Metropol, Harry J.  
 Michael, Robert Frederick, Jr.  
 Miller, James Sherwood  
 Miller, Richard Lewis  
 Miller, Thomas Templin  
 Minnick, Donald A.  
 Mitchell, David Lee  
 Montgomery, Douglas Gale  
 Moon, W. C.  
 Moore, Ellis William  
 Morgan, Robert W.  
 Morrison, Norton H.  
 Morse, Theodore Frederick  
 Moseley, Robert Galloway  
 Mazingo, William Gerald  
 Murkett, Philip Tillotson  
 Naugle, David R.  
 Naylor, Edward Joseph  
 Neumeister, Leslie Leroy  
 Newman, Bruno Rudolf  
 Ntal, George A.  
 Niedermaier, Joe M.  
 Niehaus, M. Stanley  
 Nixon, Edward Calvert  
 Norman, Matthew White  
 Nordham, Robert  
 Norris, Gene A.  
 Northrop, Sam, Jr.  
 Norton, Dudley Marshall  
 Nylen, David W.  
 O'Donnell, Jon Park  
 Ost, John W.  
 Owens, D. P.  
 Penns Grove, N. J.  
 Monroeville, N. J.  
 Phillipsburg, N. J.  
 Asheville, N. C.  
 Henderson, N. C.  
 Woodridge, N. J.  
 Winston-Salem, N. C.  
 Rochester, N. Y.  
 Macon, Ga.  
 Lynchburg, Va.  
 Haw River, N. C.  
 Durham, N. C.  
 Ridgefield Park, N. J.  
 Tuckahoe, N. Y.  
 Stratford, Conn.  
 Stroudsburg, Pa.  
 Laurelton, N. Y.  
 Fall River, Mass.  
 Maiden, N. C.  
 Ruxton, Md.  
 Asheville, N. C.  
 Gastonia, N. C.  
 Durham, N. C.  
 Belhaven, N. C.  
 Miami, Fla.  
 Orange, N. J.  
 Burlington, N. C.  
 Oil City, Pa.  
 Middletown, N. Y.  
 Wheeling, W. Va.  
 Durham, N. C.  
 Danville, Va.  
 Cynthiaana, Ky.  
 Fullerton, Pa.  
 Meshed, Iran  
 Darlington, S. C.  
 Lawland, Tenn.  
 Brooklyn, N. Y.  
 Oxford, Pa.  
 York, Pa.  
 Puerto Rico  
 Charlotte, N. C.  
 Smithfield, N. C.  
 Durham, N. C.  
 West Orange, N. J.  
 Reidsville, N. C.  
 Greensboro, N. C.  
 Hinsdale, Ill.  
 Manning, S. C.  
 Greensboro, N. C.  
 Hazleton, Pa.  
 Brooklyn, N. Y.  
 Annapolis, Md.  
 Trenton, N. J.  
 Canton, N. C.  
 Webster Groves, Mo.  
 Atlanta, Ga.  
 Andover, Mass.  
 Farmville, N. C.  
 Madison, Conn.  
 Elvins Park, Pa.  
 Bluefield, W. Va.  
 LaGrange, N. C.  
 Wheeling, W. Va.  
 New York, N. Y.  
 Bayonne, N. J.  
 Glasgow, Ky.  
 New York, N. Y.  
 Ft. Lauderdale, Fla.  
 Kingsport, Tenn.  
 Neptune Beach, Fla.  
 Lakeland, Fla.  
 Plymouth, N. C.  
 Waldwick, N. Y.  
 Conway, S. C.  
 Greenville, N. C.  
 Cazenovia, N. Y.  
 Clearwater, Fla.  
 New Alexandria, Va.  
 Oradell, N. Y.  
 Staten Island, N. Y.

Padgett, Robert L.  
 Paff, Thomas Dixon  
 Painter, Billy E.  
 Parrish, Billy Hiram  
 Parrish, Fred Kenneth  
 Patterson, James T.  
 Patton, Charles Thomas  
 Patty, Dean Ward  
 Pavlicek, Philip C.  
 Peck, Kenneth O.  
 Person, Gilbert H.  
 Peters, Ferguson E.  
 Petrakos, George Steve  
 Pfeffer, Roger H.  
 Phillips, Richard L.  
 Podolle, Richard H.  
 Powell, Albert Henry, Jr.  
 Raiford, William Patrick, Jr.  
 Rambo, James Warren  
 Ramsey, Clyde N., Jr.  
 Ratchford, George R.  
 Ratliff, Dale  
 Rauh, Edwin S.  
 Redmond, James Seymore, Jr.  
 Reece, Benny R.  
 Reilly, Richard C.  
 Renz, Harry Ward, Jr.  
 Reznick, Richard A.  
 Rice, Charles A.  
 Richardson, Richard B.  
 Richmond, James B.  
 Ricker, Hunt Norman  
 Rickey, Robert M., II  
 Rist, Monroe D.  
 Ritch, James Earle, Jr.  
 Rivers, Thomas Milton  
 Roarick, Marshall Eugene  
 Roberts, James Bankston  
 Roberts, I. Elwood  
 Robertson, James A.  
 Robinson, William G.  
 Rockwood, John, Jr.  
 Roe, Donald W.  
 Rogers, Nolan H.  
 Rosenbaum, Norman M.  
 Rosenmund, Robert Alfred  
 Rosenberg, John M.  
 Rosenthal, Joseph Stone  
 Ross, Robert R.  
 Rowe, Arthur  
 Rowell, R. E.  
 Sack, Martin, Jr.  
 Sajo, John Alex  
 Sanders, Thomas G.  
 Sanders, William E.  
 Santamaria, Angelo R.  
 Saylor, Thomas Paul  
 Shaffer, William Ronald  
 Schafroth, Donald M.  
 Scheffer, Miles Howard  
 Schellenger, Norman Donlhue  
 Schoonmaker, Fred  
 Schwartz, Donald A.  
 Schwartz, Ronald M.  
 Seaton, J. Ralph  
 Sharer, Ralph K., Jr.  
 Sharpe, John Frank  
 Shealy, Clyde Norman  
 Sheppard, Donald Lewis  
 Simmonds, Stuart Wilcox  
 Smith, Harry Hutchinson  
 Smith, James O.  
 Smith, Robert F., Jr.  
 Smith, Sidney Rufus, Jr.  
 Smith, Veleair Courtlandt  
 Smith, Walter L.  
 Smith, Whitman Erskin  
 Sommers, Richard L.  
 Sook, George Ralph  
 Spach, John Thomas  
 Spangler, Robert Fletcher  
 High Point, N. C.  
 Philadelphia, Pa.  
 Mt. Holly, N. C.  
 Siler City, N. C.  
 Durham, N. C.  
 Swissvale, Pa.  
 Morganton, N. C.  
 Kingsport, Tenn.  
 St. Petersburg, Fla.  
 Ft. Lauderdale, Fla.  
 Lambert, Miss.  
 Miami Beach, Fla.  
 Greenville, S. C.  
 St. Albans, N. Y.  
 Drexel Hill, Pa.  
 Irvington, N. J.  
 Durham, N. C.  
 Greensboro, N. C.  
 Greenwood, S. C.  
 Lynchburg, Va.  
 Gastonia, N. C.  
 Hinton, W. Va.  
 Bolt, Md.  
 Asheville, N. C.  
 Arden, N. C.  
 Birmingham, Mich.  
 Norwood, Pa.  
 Torrington, Conn.  
 Ridgewood, N. J.  
 Durham, N. C.  
 Hillsboro, N. C.  
 Tampa, Fla.  
 Durham, N. C.  
 Erie, Pa.  
 Charlotte, N. C.  
 Anderson, S. C.  
 Rockville Centre, N. Y.  
 Durham, N. C.  
 Mt. Holly, N. C.  
 Framingham, Mass.  
 Smithfield, Va.  
 Atlanta, Ga.  
 Beckley, W. Va.  
 Baltimore, Md.  
 Norfolk, Va.  
 Woodport, N. J.  
 Gastonia, N. C.  
 Durham, N. C.  
 Miami, Fla.  
 Nutley, N. J.  
 Norfolk, Va.  
 Jacksonville, Fla.  
 Lakewood, Ohio  
 Asheville, N. C.  
 Albemarle, N. C.  
 Baltimore, Md.  
 Bridgeport, Conn.  
 Havana, Cuba  
 Havertown, Pa.  
 Forest Hills, N. Y.  
 Miami Beach, Fla.  
 Lander, Wyo.  
 Brooklyn, N. Y.  
 Stamford, Conn.  
 Uniontown, Pa.  
 Cleveland, Ohio  
 Greensboro, N. C.  
 Camden, S. C.  
 Wilmington, Del.  
 Mansfield, Mass.  
 Baltimore, Md.  
 Wilmington, N. C.  
 Denniston, Va.  
 Greensboro, N. C.  
 Charleston, W. Va.  
 Boone, N. C.  
 Albemarle, N. C.  
 Kingsport, Tenn.  
 Somers Point, N. Y.  
 Winston-Salem, N. C.  
 Danville, Va.

- Spearman, Cecil E.  
 Spell, Richard Purdy  
 Spivey, Bobby Atwood  
 Spofford, Donald  
 Stahl, Frederick Andrew  
 Stark, Lawrence Wendell  
 Stark, Richard Alan  
 Stark, Rufus H.  
 Starnes, William B.  
 Stathacos, Eustace  
 Steffey, Fred H.  
 Stopp, Donald Louis  
 Strauch, David M.  
 Strickland, Daniel S.  
 Strickland, Donald B.  
 Stroud, J. Barry  
 Stuart, Eugene W., Jr.  
 Stubbs, Robert W.  
 Sward, Gilbert Leinbaugh  
 Swartz, Neil H.  
 Swecker, Edward P.  
 Swing, Mervin, Jr.  
 Sykes, Richard Lee  
 Tammillo, Joseph Richard  
 Tate, John Bibb  
 Taylor, David Wilson  
 Taylor, George F., Jr.  
 Thomas, Theodore T., Jr.  
 Thompson, Charles W.  
 Thompson, William Francis, III  
 Tice, James Richard  
 Tillman, Roy Davis  
 Tinsley, Robert Spangler  
 Tolleson, George C.  
 Torgerson, Mathias Severin, Jr.  
 Tornquist, David Adams  
 Trulove, John Robert  
 Trundle, Albert Sidney  
 Turner, John Calhoun  
 Underwood, Roland Hilton  
 Upchurch, Carlton E.  
 Upchurch, Harold M.  
 Vance, Thomas D.  
 Vandermoot, Theodore John  
 Van Deventer, Bob R.  
 Vann, James Earl  
 Varella, Chris A.  
 Wacker, August Herbert  
 Wainwright, Stephen A.  
 Walker, Clarence Wesley  
 Wall, Patterson  
 Wallace, Alston A.  
 Wallace, Edward O.  
 Warlick, Harry E.  
 Watov, Richard Halpen  
 Watson, Charles Sullivan  
 Weil, William Walter  
 Weiss, Alfred Hans, Jr.  
 Welchman, Charles B.  
 Werber, William W.  
 Wetmore, William Stratton  
 Whanger, Alan Duane  
 White, Bennett Briggs  
 White, Robert L.  
 White, Robert T.  
 Whitfield, Ralph Finley  
 Whynall, Richard G.  
 Wilbanks, George D., Jr.  
 Wiley, Don Kent  
 Wilkins, Burleigh Taylor  
 Will, Horace Jacob  
 Williams, Edward Likander  
 Williams, Kenneth Sterling  
 Wilson, Colin H.  
 Wilson, Rollin HUGH  
 Wilson, Walter Quinten  
 Wilson, William James  
 Winfield, Gordon Telfair, Jr.  
 Winslow, William T.  
 Woodward, John Horton  
 Woolard, William L.  
 Hinsdale, Ill.  
 Clinton, N. C.  
 Suffolk, Va.  
 Pensacola, Fla.  
 Manhasset, N. Y.  
 Ridgewood, N. J.  
 Ridgewood, N. J.  
 Greenville, N. C.  
 Burlington, N. C.  
 Raleigh, N. C.  
 Charlotte, N. C.  
 Pen Argyl, Pa.  
 Benton, Pa.  
 Douglasville, Ga.  
 Rich Square, N. C.  
 Upper Darby, Pa.  
 Tampa, Fla.  
 Collingswood, N. J.  
 Chevy Chase, Md.  
 Rye, N. Y.  
 Washington, D. C.  
 Philadelphia, Pa.  
 Suffolk, Va.  
 Duluth, Minn.  
 La Grange, Ga.  
 Durham, N. C.  
 Henderson, N. C.  
 Pearisburg, Va.  
 Creedmoor, N. C.  
 Honolulu, Hawaii  
 Charlotte, N. C.  
 Mt. Vernon Springs, N. C.  
 Lynchburg, Va.  
 Greenville, S. C.  
 Westfield, N. J.  
 Monsey, N. Y.  
 Pinnacle, N. C.  
 Wilmington, N. C.  
 Fair Bluff, N. C.  
 Lake Worth, Fla.  
 Durham, N. C.  
 Angier, N. C.  
 Spruce Pine, N. C.  
 Bronxville, N. Y.  
 Princeton, N. J.  
 Clinton, N. C.  
 Roanoke, Va.  
 Jamaica, N. Y.  
 Indianapolis, Ind.  
 Durham, N. C.  
 Birmingham, Mich.  
 Gainesville, Fla.  
 Havertown, Pa.  
 Newton, N. C.  
 Trenton, N. J.  
 Anderson, S. C.  
 Greenfield, Ind.  
 Brevard, N. C.  
 Ridgewood, N. J.  
 College Park, Md.  
 New Rochelle, N. Y.  
 Cleveland, Ohio  
 Plymouth, N. C.  
 Belmont, Mass.  
 Masonville, N. J.  
 Durham, N. C.  
 Nutley, N. J.  
 Tampa, Fla.  
 Erie, Pa.  
 Bridgetown, Va.  
 Raleigh, N. C.  
 South Weymouth, Mass.  
 Charlotte, N. C.  
 Marshallberg, N. C.  
 Marcellus, N. Y.  
 Greenville, N. C.  
 Mocksville, N. C.  
 Petersburg, Va.  
 Goldsboro, N. C.  
 Cape Cod, Mass.  
 Pinetown, N. C.

Wright, Donald J.  
 Wynne, George Jeffrey  
 Young, James Frank  
 Younts, Robert Wesley  
 Zeeman, Charles Gordon  
 Zerby, William Elwood  
 Zimmerman, Joe  
 Zimmerman, Robert Tracy  
 Zintbaum, William E.

Charlotte, N. C.  
 Willis Whart, Va.  
 Havertown, Pa.  
 High Point, N. C.  
 Englewood, N. J.  
 Reading, Pa.  
 Leesburg, Va.  
 Wichita Falls, Texas  
 Newton, N. C.

## JUNIOR CLASS

Adams, Charles A., Jr.  
 Alexander, Uhlman S.  
 Allen, I. Dayton  
 Allison, Raymond Dean  
 Anderson, Robert Eugene  
 Anderson, Samuel Gober  
 Archambault, Norman  
 Ashe, Vance B.  
 Bafford, Edward Donald  
 Bagle, R. E.  
 Baker, Gordon  
 Ball, Walter Herbert  
 Bangle, Robert Edward  
 Banks, John Joseph  
 Bannister, Thomas Turpin  
 Baptiste, Edward Joseph  
 Barfield, Victor Warren  
 Barranco, Frank T.  
 Barry, John Lavallen, III  
 Barwick, Howard E.  
 Bates, Robert Kenneth  
 Beal, Jesse C.  
 Becher, George David  
 Beck, Charles Edward, Jr.  
 Bell, William G.  
 Bennett, Daniel R.  
 Berry, Maxwell K.  
 Best, Lee James  
 Bickel, Robert Arthur  
 Binda, George Edward  
 Bisselle, Robert Ashford  
 Bitter, Edwin Ward  
 Blalock, William S.  
 Blanton, Paul G.  
 Blevins, Maurice Everett  
 Bodenhamer, David Lee  
 Brackett, Edwin Harold  
 Branson, William Henry, Jr.  
 Brickman, Thayer Ellis  
 Bridges, Edwin Burke  
 Brill, William  
 Brock, Jimmy Wilbert  
 Brokenshire, Melvyn Royal  
 Brooks, George H., III  
 Brooks, Thomas D.  
 Brookshire, Samuel James  
 Browder, Leslie E.  
 Brown, John Crawford  
 Brown, Samuel Hoyt  
 Brunson, Ronald Augustus  
 Buchanan, Robert Roy  
 Buschman, Richard A.  
 Butler, William W.  
 Butrym, Robert Earl  
 Byers, Bill Magness  
 Byron, Alexander  
 Cahill, John Edward, Jr.  
 Callaway, Paul Frederick  
 Cammon, Philip Holland  
 Cannon, Samuel F.  
 Carpenter, Raymond Lewis, Jr.  
 Carroll, John N.  
 Cavaliere, Benjamin Albert  
 Cherry, Floyd B.  
 Chritton, John E.  
 Clark, J. Yates  
 Clark, Robert V.  
 Clifton, Yergert Hunt  
 Coble, James H.

Pleasantville, N. Y.  
 Charlotte, N. C.  
 McKeesport, Pa.  
 Washington, D. C.  
 Wheeling, W. Va.  
 Glen Rock, N. J.  
 West Warwick, R. I.  
 Asheville, N. C.  
 Towson, Md.  
 Concord, N. C.  
 Ventnor, N. J.  
 Fayetteville, N. C.  
 Concord, N. C.  
 Greenwich, Conn.  
 Urbana, Ill.  
 Hong Kong, China  
 LaGrange, N. C.  
 Baltimore, Md.  
 Plainfield, N. J.  
 Miami, Fla.  
 Mt. Vernon, N. Y.  
 Nashville, N. C.  
 Longmeadow, Mass.  
 Harrisburg, Pa.  
 Carrollton, Ky.  
 McComb, Ohio  
 Morganfield, Ky.  
 Dunn, N. C.  
 Reading, Pa.  
 Medford, Mass.  
 Washington, D. C.  
 West Orange, N. J.  
 Lexington, N. C.  
 Houston, Texas  
 Charleston, S. C.  
 Winston-Salem, N. C.  
 Pelzer, S. C.  
 Durham, N. C.  
 Dorchester, Mass.  
 Thomasville, N. C.  
 Locust Hill, Va.  
 Red Springs, N. C.  
 Macon, Ga.  
 Apex, N. C.  
 Little Rock, Ark.  
 Taylorsville, N. C.  
 Winston-Salem, N. C.  
 White Plains, N. Y.  
 Tallapoosa, Ga.  
 Durham, N. C.  
 Bluefield, W. Va.  
 Alex, Va.  
 Atlanta, Ga.  
 McKeesport, Pa.  
 Charlotte, N. C.  
 Buzzards Bay, Mass.  
 Litchfield, Conn.  
 Belleville, Ill.  
 Bridgeville, Del.  
 St. James, N. Y.  
 West Orange, N. J.  
 Maiden, Mass.  
 Norristown, Pa.  
 Durham, N. C.  
 Birmingham, Mich.  
 Leesburg, Fla.  
 Bridgeport, Conn.  
 Jackson, Miss.  
 Concord, N. C.

- Cochran, Norman Booker  
 Coleman, John William  
 Colvin, John C.  
 Condon, Irvin Maurice  
 Conti, Gino Donti  
 Conti, Angelo L.  
 Cooke, Clifton N.  
 Cooper, Thomas Walker  
 Corrigan, Eugene F.  
 Cottman, Brooke Powell  
 Cox, Ernest Howard  
 Crane, James Dewar  
 Crawford, Frank Teller  
 Crawford, Malcolm F.  
 Crawford, Narvel James  
 Cross, William H.  
 Crowder, Richard J.  
 Currin, William Dodson  
 Dailey, Henry Elwood  
 Daine, Donn David  
 Dalgleish, Thomas Arthur  
 Dannenberg, Richard B.  
 Davidson, William T., Jr.  
 Davis, Jolyon E.  
 Davis, Richard Amos  
 Davis, Robert Louis  
 Davis, Robert Paul  
 Dawes, Kenneth Janney, Jr.  
 Deal, C. Pinckney, Jr.  
 Dean, Earnest W., Jr.  
 Deck, Richard Allen  
 deGuzman, Robert John  
 Delchamps, Alfred Frederick  
 DeLong, David D.  
 DeMidowitz, Bill P.  
 Denny, George Richard  
 Desvernine, Kenneth Peter  
 Dillon, Thomas Patrick  
 Dilts, Charles Robert  
 Divine, Thomas McCallie, Jr.  
 Dohner, Donald Canfield  
 Donovan, James Joseph, Jr.  
 Douros, John D., Jr.  
 Downing, William Thomas  
 Doyle, Kenneth R.  
 Dukes, Herbert Trice  
 Duncan, Guy Eugene  
 Duncan, John J.  
 Dunne, Walter Vincent  
 Dunson, John C.  
 Durham, Lee Ballinger  
 Earon, Blaine A.  
 Eaton, Harold Thomas  
 Edwards, Claude Everett, Jr.  
 Ellington, William Thomas  
 Engberg, John P.  
 Epps, Charles Lee  
 Epps, Joe Schrum  
 Estes, Jerry Sylvester  
 Evans, Blanton Delmar  
 Evans, Jack Craver  
 Fahey, Francis Patrick  
 Faley, Richard W.  
 Farmer, John Lovelace, Jr.  
 Farquhar, Richard Lewis  
 Feather, Ben W.  
 Felt, Jeremy P.  
 Field, Frank E.  
 Finberg, Robert Louis  
 Fisher, William Prescott  
 Flint, Thomas Levings  
 Folk, Chris Evans  
 Forbes, Gordon M.  
 Ford, John Byron  
 Foreman, Thomas L.  
 Fornes, Guy Leo, Jr.  
 Fox, John Howard  
 Franks, Stephen Field  
 Fraser, John, III  
 Friedlund, John Edwin  
 Game, Paul, Jr.  
 Columbus, Ga.  
 Forest Hills, L. I., N. Y.  
 Pleasant Ridge, Mich.  
 Wildwood, N. J.  
 Phillipsburg, N. J.  
 Hartford, Conn.  
 Danvers, Mass.  
 Tampa, Fla.  
 Baltimore, Md.  
 Baltimore, Md.  
 Durham, N. C.  
 North Warren, Pa.  
 Hartsville, S. C.  
 Wilmington, N. C.  
 Asheville, N. C.  
 Bristol, Tenn.  
 High Point, N. C.  
 Oxiord, N. C.  
 Watertown, Mass.  
 Fort Knox, Ky.  
 Westminster, Md.  
 Cedarhurst, N. Y.  
 Annapolis, Md.  
 Raleigh, N. C.  
 Newark, Del.  
 Livingston, Ala.  
 Schuylkill Haven, Pa.  
 Lawrenceville, N. J.  
 Charlotte, N. C.  
 Bartow, Fla.  
 Hutchinson, Kan.  
 Hudson, N. Y.  
 Mobile, Ala.  
 Reading, Pa.  
 Neptune, N. J.  
 Richmond, Ind.  
 N. Plainfield, N. J.  
 Monroe, N. C.  
 Durham, N. C.  
 Kingsport, Tenn.  
 Havertown, Pa.  
 Brighton, Mass.  
 Clifton, New Jersey  
 Decatur, Ill.  
 Winston-Salem, N. C.  
 Tampa, Fla.  
 Fayetteville, N. C.  
 Hempstead, N. Y.  
 Garden City, N. Y.  
 Jacksonville, Fla.  
 Birmingham, Mich.  
 Altoona, Pa.  
 Brockton, Mass.  
 Pensacola, Fla.  
 Warrenton, N. C.  
 Bradenton, Fla.  
 Newton, N. C.  
 Newton, N. C.  
 Ansell, Mo.  
 Candler, N. C.  
 Lexington, N. C.  
 Worcester, Mass.  
 West Hartford, Conn.  
 Wilson, N. C.  
 Monessen, Pa.  
 Curryville, Mo.  
 Putman Valley, N. Y.  
 Miller Place, N. Y.  
 Englewood, N. J.  
 Grosse Pointe, Mich.  
 Joliet, Ill.  
 Charlotte, N. C.  
 Patchogue, N. Y.  
 Alexander City, Ala.  
 Durham, N. C.  
 Durham, N. C.  
 New Hyde Park, L. I., N. Y.  
 Hendersonville, N. C.  
 Jacksonville, Fla.  
 Durham, N. C.  
 Tampa, Fla.



Garlington, James Conway  
 Gaston, Harley Black  
 Gausman, William Henry, Jr.  
 Genette, Sidney Wilson, Jr.  
 Gibbs, Robert Coleman  
 Gibson, Harold Eugene, Jr.  
 Gibson, James Franklin  
 Gilliam, John Rue  
 Gilpatrick, Elmer E.  
 Glaze, Richard  
 Glenn, Earl Hollis  
 Glennie, John Raymond  
 Gobbel, Luther Russell  
 Goebert, Herbert William, Jr.  
 Goettsch, LaVerne Stanley  
 Goldwasser, Maxwell Robert  
 Gorham, Alden Burr  
 Grabowski, Edwin T.  
 Graham, Joseph L.  
 Grahl, Bob H.  
 Graye, Alexander  
 Grigg, Marvin Atkins, Jr.  
 Grune, George Vincent  
 Gude, Robert L.  
 Guest, Floyd Emory, Jr.  
 Hagberg, Roy E., Jr.  
 Hager, Dudley Pierce  
 Hager, Gerald Leonard  
 Hahn, Raymon J.  
 Hannin, George Alphonse, III  
 Hanson, William Robert  
 Hardin, Paul, III  
 Hardison, James  
 Harris, Christie Gus  
 Harrison, Roscoe Franklin  
 Haskins, John William  
 Hawkins, Raymond Landis  
 Heller, Paul E.  
 Henderson, Thomas Briggs, Jr.  
 Hennessee, M. Nixon, III  
 Herrero, Miguel E.  
 Hess, Dexter Winfield  
 Hiers, Marion G.  
 Higgins, William Arthur  
 Hilker, John Hamilton  
 Hill, T. F., Jr.  
 Hilton, James Lee  
 Hobson, George  
 Hodgson, Richard Holmes  
 Hollandsworth, R. Melvin  
 Hollenbeck, William Charles  
 Hooker, Alfred Frank, Jr.  
 Hooker, Raymond B., Jr.  
 Hoover, George B.  
 Hopper, Richard Francis  
 Horner, Frank Burke  
 Houser, James Lloyd  
 Howard, J. Woodford, Jr.  
 Howard, Michael Ross  
 Howell, Clewell, Jr.  
 Howie, John H., Jr.  
 Howse, Ralph M.  
 Hudson, Robert C.  
 Huffman, Francis Murrill  
 Hugus, Wright  
 Hunt, Charles Jackson, Jr.  
 Hunter, Eugene G., Jr.  
 Hyman, Lewis Bernard, Jr.  
 Ingham, Olin H.  
 Ivey, Benjamin Carr  
 Ivey, David Middleton  
 Jefferson, Arthur S.  
 Johnson, David Dowell  
 Johnson, James B.  
 Johnson, Peter Grayson  
 Johnson, Richard S.  
 Johnston, William David  
 Jones, Leonidas Merritt, Jr.  
 Jordan, Verner Calvin, Jr.  
 Joyce, William Ogden  
 Kaelin, William George

Birmingham, Ala.  
 Belmont, N. C.  
 South Orange, N. J.  
 Memphis, Tenn.  
 Bath, N. C.  
 Kenton, Ohio  
 Wilmington, N. C.  
 Pine Beach, N. J.  
 Bangor, Maine  
 Orlando, Fla.  
 Durham, N. C.  
 Kennebunk Port, Maine.  
 Guilford College, N. C.  
 Coatesville, Pa.  
 Winterset, Iowa  
 New York, N. Y.  
 Englewood, N. J.  
 Seymour, Conn.  
 Durham, N. C.  
 Asheville, N. C.  
 Mt. Tabor, N. J.  
 Lawndale, N. C.  
 White Plains, N. J.  
 Englewood, N. J.  
 Anderson, S. C.  
 Durham, N. C.  
 Louisville, Ky.  
 Detroit, Mich.  
 Seardsdale, N. Y.  
 Paducah, Ky.  
 Baltimore, Md.  
 Birmingham, Ala.  
 High Point, N. C.  
 Washington, D. C.  
 Bristol, Va.  
 New Martinsville, W. Va.  
 Clarksburg, W. Va.  
 Huntington, W. Va.  
 Charlotte, N. C.  
 Concord, N. C.  
 Hato Key, P. R.  
 Rome, Ga.  
 Orangeburg, S. C.  
 Farrell, Pa.  
 Asheboro, N. C.  
 Durham, N. C.  
 Texarkana, Ark.  
 Philadelphia, Pa.  
 Raleigh, N. C.  
 Salem, Va.  
 Palm Beach, Fla.  
 Martinsville, Va.  
 Kinston, N. C.  
 Williamsport, Pa.  
 El Toro, Calif.  
 Brielle, N. J.  
 Washington, D. C.  
 Prestonsburg, Ky.  
 Concord, N. C.  
 Ruxton, Md.  
 Charlotte, N. C.  
 Fairfield, Ala.  
 Winston-Salem, N. C.  
 Pikeville, Ky.  
 Wheeling, W. Va.  
 Pleasant Garden, N. C.  
 Kingsport, Tenn.  
 Dillon, S. C.  
 Concord, N. H.  
 Raleigh, N. C.  
 Charlotte, N. C.  
 Rye, N. Y.  
 Baton Rouge, La.  
 Fairmont, N. C.  
 Baldwin, L. I., N. Y.  
 Pahoee, Fla.  
 Massena, N. Y.  
 Raleigh, N. C.  
 Buenos Aires, Argentina  
 New Rochelle, N. Y.  
 Rockaway, N. Y.

- Kalevas, Bill Aristedes  
 Keffer, Charles  
 Keith, Alfred Thomas  
 Kennedy, Horton Parmellee  
 Kent, Florence Smith  
 Keye, Paul Falloa  
 Keziah, Sanford Perry  
 Kiger, Willie Maxwell  
 Kime, Richard Charles  
 King, Arthur Bruce  
 Kinneman, Robert Eugene  
 Kirby, James Chasey, Jr.  
 Klein, Harvey  
 Knickerbocker, Donald C.  
 Kobzina, Arnold James  
 Krayner, Alfred Carl  
 Kreider, Denneth Richard  
 Kulpan, James Neil  
 Kunkle, Harold W.  
 Kurzrock, Warren Walter  
 Lang, Frank Alexander  
 Lassetter, Jack Kinney  
 Latimer, Richard Lee  
 Latta, R. A.  
 Lawter, Frederic Martin  
 Lee, Pope Matthews  
 Leslie, Gary Randall  
 Lester, Kenney Thomas  
 Levy, Irving Hirsh  
 Lindstrom, Malcolm Stuart  
 Linn, Bruce Oscar  
 Lipton, Harold Pons  
 Llenza, Charles Frederick  
 Lloyd, Leonard W.  
 Longley, James Benjamin, Jr.  
 Lott, Charles Howell  
 Lott, John Edwin  
 Loub, Arthur Frederick  
 Lowdermilk, Max Kearns  
 Lowenthal, Daniel Abraham, Jr.  
 Lucas, William Reed  
 Lugar, Ashby G., Jr.  
 Lustig, George A.  
 Lynch, George Cotchett  
 McAnerney, Marshall Joseph, III  
 McCain, William Warren  
 McCall, Ben Waring  
 McClannan, Ralph  
 McGaughey, James Paul  
 McGough, Robert Saunders  
 McGuire, John Joseph  
 McKeever, Earle Alexander  
 McKenzie, Claude Fleatus  
 McLean, Leslie Monroe  
 McLean, Robert Davidson  
 McLemore, Ralph Stuart, Jr.  
 McNair, Barak  
 McNair, Conrad Buchanan  
 McNamara, Thomas Neal  
 Mack, Leslie Eugene  
 Maddox, Houston Noble  
 Malone, Robert William  
 Malyniak, Joseph  
 Martin, James Arthur, Jr.  
 Mead, Dayton Richard, Jr.  
 Menumoli, Richard O.  
 Menken, Kenneth Andrews  
 Merritt, Mervin Frank  
 Merwarth, Charles Richard  
 Michalek, Donald Richard  
 Midgette, Robert Bryant  
 Miller, David Edmond  
 Miller, Emery Elwood  
 Miller, Robert Allen  
 Milling, James Reaves  
 Minick, John E.  
 Mitchell, Billy Pender  
 Mitchell, David Cramer  
 Mitchell, Donald Walcutt  
 Mostellar, Henry Curtis, Jr.  
 Mote, William Eugene  
 Rockingham, N. C.  
 Philadelphia, Pa.  
 Brockton, Mass.  
 Paris, France  
 Mesa, Ariz.  
 Los Angeles, Calif.  
 High Point, N. C.  
 Durham, N. C.  
 Scarsdale, N. Y.  
 Chagrin Falls, Ohio  
 Greenfield, Ind.  
 Long Branch, N. J.  
 Pittsburgh, Pa.  
 Cincinnati, N. Y.  
 Riverside, Ill.  
 St. Petersburg, Fla.  
 Palmyra, Pa.  
 Norfolk, Va.  
 Elyria, Ohio  
 Englewood, N. J.  
 Ft. Lauderdale, Fla.  
 Macon, Ga.  
 Bethesda, Md.  
 N. Tanawanda, N. Y.  
 Gainesville, Fla.  
 Asheville, N. C.  
 Pikeville, Ky.  
 Bristol, Va.  
 Birmingham, Ala.  
 Oradell, N. J.  
 Woodhaven, N. Y.  
 Beechurst, L. I. N. Y.  
 Hato Rey, P. R.  
 Robbinsville, N. C.  
 Nashville, Tenn.  
 Plainfield, N. J.  
 Kansas City, Mo.  
 Amityville, N. Y.  
 Asheboro, N. C.  
 Baltimore, Md.  
 Nashville, Tenn.  
 Oceana, W. Va.  
 Bronx, N. Y.  
 Anchorage, Alaska  
 Plandome, N. Y.  
 Elizabeth City, N. C.  
 Jacksonville, Fla.  
 Norfolk, Va.  
 Durham, N. C.  
 Chardon, Ohio  
 Miles City, Mont.  
 Johnstown, Pa.  
 Athens, Tenn.  
 Dallas, Texas  
 Tampa, Fla.  
 Macon, Ga.  
 Lakeland, Ga.  
 Macon, Ga.  
 Bethesda, Md.  
 Washington, D. C.  
 Snow Hill, N. C.  
 Park Ridge, Ill.  
 Nesquehoning, Pa.  
 Oak Hill, W. Va.  
 Miami Beach, Fla.  
 Jamaica, N. Y.  
 Allenhurst, N. J.  
 Greensboro, N. C.  
 Cranford, N. J.  
 Westfield, Mass.  
 Raleigh, N. C.  
 Elizabeth City, N. C.  
 Durham, N. C.  
 Key West, Fla.  
 Florence, S. C.  
 Durham, N. C.  
 Fairmont, N. C.  
 Grosse Pointe, Mich.  
 Summit, N. J.  
 Mobile, Ala.  
 Hapeville, Ga.

Mneller, John George  
 Mullinax, Perry Franklin  
 Munies, Richard Earl  
 Murphey, Frank Crosby  
 Murphy, Lawrence Thomas  
 Murphy, Robert Edward  
 Myers, Duane W.  
 Needham, George Richard  
 Nelson, Richard Copeland  
 Nelson, Ronald Prescott  
 Nesbit, Charles L.  
 Nesslinger, Ralph O.  
 Nial, Thomas L.  
 Nichols, Francis A.  
 Nichols, John L.  
 Noel, William Lee  
 Norwood, Olan Watson  
 Nunn, Roland Cicero  
 O'Donovan, Denis  
 Oglukian, Raymond Levon  
 Oliver, Bernard Ross  
 Oliver, Manton M.  
 Olivera, Hugh V.  
 O'Mausky, Samuel I.  
 Ormand, William Leou  
 Osborne, William N.  
 O'Steen, Arthur Marion  
 Ozment, Jere Marr  
 Palmore, Erdman Ballagh  
 Parish, James Donald  
 Parks, Russell Austin  
 Parrish, Dinguid Beirne  
 Partain, Eugene  
 Patrick, John Earle  
 Patterson, Robert Floyd  
 Patterson, Sam Polk  
 Paul, Albert Benner  
 Peacock, James Daniel  
 Pearce, Arthur James  
 Pearson, Alden B., Jr.  
 Penner, Robert Allau  
 Pepper, George  
 Phillips, Carroll Preston  
 Piehoff, Zachary T.  
 Pippel, Richard Wright  
 Pischel, Richard Anton  
 Pitman, John Mathews  
 Plimpton, Hollis W., Jr.  
 Pollock, James Harold  
 Pomeroy, Charles Edward  
 Poss, Henry Maurice  
 Powell, William C.  
 Price, Robert McCollin  
 Price, William Knox, Jr.  
 Radner, Sanford R.  
 Rankin, Frank L., Jr.  
 Rasberry, Robert Pittman, Jr.  
 Raywid, Alan  
 Read, Robert Meudel  
 Reams, Charles E.  
 Reap, Charles A.  
 Reed, Myron George, II  
 Reeves, Ernest Gene  
 Renuart, Adhemar W.  
 Reyle, Bruce William  
 Reynolds, Joseph C.  
 Richardson, Roy G.  
 Richter, Carl Hugo  
 Ring, Clay Vance, Jr.  
 Ritchie, Robert L.  
 Roberts, C. Buck  
 Robinson, Albert Donald  
 Rogers, Robert Taylor  
 Rogers, William Henry  
 Ronca, Paul Craue  
 Rose, Louis Langford  
 Ross, Joseph G.  
 Rountree, Wallace Daniel  
 Rucker, Richard C.  
 Runyan, Thorne Leslie  
 Rusinow, Dennison I.

Oklmulgee, Okla.  
 Richmond, Va.  
 Teaneck, N. J.  
 Charlotte, N. C.  
 Lancaster, Pa.  
 Spencerport, N. Y.  
 Brookville, Pa.  
 Conneaut, Ohio  
 Lynchburg, Va.  
 Longmeadow, Mass.  
 Pleasant Garden, N. C.  
 Staten Island, N. Y.  
 Ft. Lauderdale, Fla.  
 Woodbridge, N. J.  
 East Aurora, N. Y.  
 Birmingham, Ala.  
 Jasper, Fla.  
 Miami, Fla.  
 Miami, Fla.  
 Charlotte, N. C.  
 Durham, N. C.  
 Reidsville, N. C.  
 Vedado, Havana  
 Leaksville, N. C.  
 Bessemer City, N. C.  
 Hayti, Mo.  
 Durham, N. C.  
 Dyersburg, Tenn.  
 Winsion-Salem, N. C.  
 Davenport, Iowa  
 Cresskill, N. J.  
 Huntington, W. Va.  
 Paragonid, Ark.  
 Asheboro, N. C.  
 Roseboro, N. C.  
 Memphis, Tenn.  
 Upper Darby, Pa.  
 Baltimore, Md.  
 Greensboro, N. C.  
 Raleigh, N. C.  
 Decatur, Ga.  
 Bronx, N. Y.  
 Memphis, Tenn.  
 Greensboro, N. C.  
 Glassboro, N. J.  
 New York, N. Y.  
 Williamsburg, Va.  
 Miami Beach, Fla.  
 Westerville, Ohio  
 Louisville, Ky.  
 Chattanooga, Tenn.  
 Jacksonville, Fla.  
 New York, N. Y.  
 Charlotte, N. C.  
 Brooklyn, N. Y.  
 Mt. Holly, N. C.  
 Kinston, N. C.  
 Washington, D. C.  
 St. Stephens, S. C.  
 Toledo, Ohio  
 Albemarle, N. C.  
 Colombia, S. A.  
 Chattanooga, Tenn.  
 Miami, Fla.  
 Fair Lawn, N. J.  
 Asheville, N. C.  
 Columbia, Pa.  
 Savannah, Ga.  
 Kernersville, N. C.  
 Huntington, W. Va.  
 Durham, N. C.  
 Rutherford, N. J.  
 Dnrham, N. C.  
 Durham, N. C.  
 Niagara Falls, N. Y.  
 Charlotte, N. C.  
 Spring City, Pa.  
 Portsmouth, Va.  
 Bristol, Tenn.  
 Norfolk, Va.  
 St. Petersburg, Fla.

- Rutherford, John M., Jr.  
 Rutherford, Robert Owen  
 Saieed, Alfred Earl  
 St. Clair, Charles Wade  
 Salazar, Mauro George  
 Sarazen, John C.  
 Sasser, Louis L.  
 Savitt, Herbert S.  
 Scalise, Vincent J.  
 Schaefer, Norb F., Jr.  
 Schwarz, Fred K.  
 Scott, Samuel Gray  
 Scott, William C.  
 Self, Joseph M.  
 Sharpe, Keith Yount  
 Shull, Joseph Roger  
 Shumaker, Samuel Robert  
 Shuster, Charles Willard  
 Sikes, L. O.  
 Siler, Clifton Eugene  
 Simon, Harold  
 Simpson, Robert Truesdale  
 Simpson, Ronald Vincent  
 Skerrett, Russell Cain  
 Skinner, Roland L., Jr.  
 Sloss, James McLean  
 Smith, Gilbert H.  
 Smith, Louis Dale  
 Smith, Richard Melville  
 Smith, William L.  
 Smullen, John James, Jr.  
 Snyder, Allan D.  
 Snyder, Bruce Louis  
 Snyder, Harry M.  
 Sorrell, William Richard  
 Sovick, George P.  
 Spangler, Ronald T., Jr.  
 Sparks, Charles S.  
 Speziale, Joseph Louis  
 Sprague, Robert Norman  
 Stants, Lester, John, Jr.  
 Steverson, John Kerman  
 Stillwell, H. Daniel  
 Sottlar, James F.  
 Stradley, Walter M.  
 Strauss, Saul  
 Stull, Clark D.  
 Sullivau, James H.  
 Swanson, Edward N.  
 Swofford, Thomas H., Jr.  
 Tagert, Russell Hayes, Jr.  
 Tamis, Robert Howard  
 Taylor, Morris R.  
 Taylor, Walter H., Jr.  
 Terrell, Robert Lewis  
 Thomas, Richard F., Jr.  
 Thomas, Royce Phelps  
 Thomas, Theodore Hubert  
 Tomlinson, Charles John  
 Trent, O. W., III  
 Tsangaris, Neofytos T.  
 Tucker, C. C., Jr.  
 Tucker, Perry Alan  
 Tuthill, David Foster  
 Tymosko, Donald Michael  
 Van Alstyne, James Linton  
 Van Camp, David  
 Varco, Samuel Andrew  
 Vaughan, Joseph L.  
 Vaughn, Howard A.  
 Vilas, John M.  
 Wagner, Robert Charles  
 Ward, William Milton  
 Warlick, Charles Henry  
 Watkins, Charles Eugene  
 Watson, David Earl  
 Webb, Frank Maury  
 Weidlich, William Robert  
 Weidman, Frank Cross  
 Weimann, Robert Bruce  
 Weiss, James Owen  
 Charleston, W. Va.  
 White Plains, N. Y.  
 Greenville, N. C.  
 Welch, W. Va.  
 Atlantic Beach, N. Y.  
 White Plains, N. Y.  
 Durham, N. C.  
 Ansonia, Conn.  
 Geneva, N. Y.  
 Indianapolis, Ind.  
 Webber Groves, Mo.  
 Kaunapolis, N. C.  
 Petersburg, Va.  
 Greensboro, N. C.  
 Winston-Salem, N. C.  
 Bridgeport, Conn.  
 Washington, D. C.  
 Glen Rock, N. J.  
 Greensboro, N. C.  
 Asheville, N. C.  
 Trenton, N. J.  
 Rock Hill, S. C.  
 Bridgeport, Conn.  
 Western Springs, Ill.  
 Orangeburg, S. C.  
 Birmingham, Ala.  
 Dayton, Ohio  
 Arnold, Md.  
 Poughkeepsie, N. Y.  
 Durham, N. C.  
 Salisbury, Md.  
 Rutland, Vt.  
 Rutland, Vt.  
 Hickory, N. C.  
 Dunn, N. C.  
 Charleston, W. Va.  
 Fort Lauderdale, Fla.  
 Paris, Ky.  
 Torrington, Conn.  
 Fanwood, N. J.  
 Sharon Hill, Pa.  
 Durham, N. C.  
 Staten Island, N. Y.  
 Shrub Oak, N. Y.  
 War, W. Va.  
 Brooklyn, N. Y.  
 Ridley Park, Pa.  
 Columbus, Ga.  
 Pilot Mountain, N. C.  
 Greensboro, N. C.  
 Greensboro, N. C.  
 New York, N. Y.  
 Durham, N. C.  
 Pelzer, S. C.  
 East Quogue, N. J.  
 Winston-Salem, N. C.  
 Jacksonville, Fla.  
 Nelsonville, Ohio  
 Malverne, N. Y.  
 Reidsville, N. C.  
 Clearwater Beach, Fla.  
 Plainfield, N. J.  
 Wadesboro, N. C.  
 Pittsburgh, Pa.  
 Seymour, Conn.  
 Irvington-on-Hudson, N. Y.  
 Pittsburgh, Pa.  
 Buffalo, N. Y.  
 Durham, N. C.  
 High Point, N. C.  
 Tenafly, N. J.  
 Irvington, N. Y.  
 Bristol, Tenn.  
 Hickory, N. C.  
 Pelzer, S. C.  
 Okmulgee, Okla.  
 Lake Wales, Fla.  
 North Plainfield, N. J.  
 Rosemont, Pa.  
 Haddon Heights, N. J.  
 Memphis, Tenn.

Weldon, Robert Walter  
Wells, Allison Deans  
White, Robert Arlen  
Whitescarver, James Field, Jr.  
Widenhouse, Ernest C., Jr.  
Widner, Ralph Randolph  
Wiita, Robert Matthew  
Wild, Glenn Amos  
Williams, Charles Ayres, Jr.  
Williams, Earl LeRoy  
Williams, John Charles  
Wills, Bruce B.  
Wilson, Charles Howe  
Wilson, Dwight R., Jr.  
Windom, Robert Emerson  
Withers, Christopher  
Withers, W. Kenney  
Wolff, Robert Alpha  
Wood, Roy Stanley  
Wood, Whitehill Thompson  
Worthey, Eugene Burton  
Yeates, Clarence Owen  
Young, Alvin Martin  
Young, H. Claude  
Zavertnik, Otis Vernon  
Zelter, A. Richard, Jr.  
Zioikowski, Theodore J.

Meriden, Conn.  
Wilson, N. C.  
Baltimore, Md.  
Baltimore, Md.  
Greensboro, N. C.  
San Mateo, Calif.  
Monesson, Pa.  
Pittsburgh, Pa.  
New Haven, Conn.  
Jacksonville, Fla.  
Raleigh, N. C.  
Erwin, Tenn.  
Rochester, N. Y.  
Mt. Vernon, N. Y.  
St. Petersburg, Fla.  
Port Washington, N. Y.  
Jacksonville, Fla.  
Miami Beach, Fla.  
Jacksonville, Fla.  
Annapolis, Md.  
San Francisco, Calif.  
Norfolk, Va.  
Trenton, N. J.  
Charlotte, N. C.  
Englewood, N. J.  
New York, N. Y.  
Montevallo, Ala.

SENIOR CLASS

Adams, Morgan R.  
Adams, Nelson Falls  
Adcock, Louis Henry  
Adkins, Eli Richard  
Allen, Charles, Jr.  
Allen, Frank Conrad  
Allen, Philemon Macon  
Allen, Richard C.  
Allen, Robert H.  
Anderson, Robert J.  
Armstrong, Pete Robertson  
Baggs, Donald T.  
Bain, David Edvard  
Bain, Willis Robinson, Jr.  
Baird, Bruce  
Baldwin, Jackson Lee  
Baldwin, William Lee  
Bane, Allan  
Baroff, Philip  
Bates, Earl K., Jr.  
Beck, Wade Hampton, Jr.  
Beck, William Harvey  
Bedell, Harold Edward  
Benfer, Norman A.  
Bennett, Calvin Fletcher  
Bensinger, Robert G.  
Bergeron, William Lawrence  
Best, John Hardin  
Bianchi, Richard E.  
Biddison, Mark  
Bingaman, John W.  
Bingman, Kenneth R.  
Blackburn, John C.  
Blair, Richard M.  
Blanchard, Ralph William, Jr.  
Bland, Bruce Francis  
Blanton, Keith Gilbert  
Blaylock, Dan W.  
Bliss, George Y.  
Bobbitt, Joseph Irvin  
Boone, Charles C.  
Boshinski, Edwin Ernest  
Bourland, William Lee  
Bovaird, George C.  
Bowling, Lewis L., Jr.  
Bowman, Lawrence Colin  
Boyce, Robert R.  
Boyd, Frederick Daniel  
Boynton, John Gorham  
Branch, Bobby C.  
Brennen, Robert Thomas

Louisville, Ky.  
Charlotte, N. C.  
Durham, N. C.  
Pony, Mont.  
Coronado, Calif.  
Washington, D. C.  
Washington, D. C.  
Wichita, Kan.  
Baldwinsville, N. Y.  
Lynn, Mass.  
High Point, N. C.  
St. John's, Newfoundland  
Williamsville, N. Y.  
Petersburg, Va.  
Fredonia, N. Y.  
Durham, N. C.  
Durham, N. C.  
Austell, Ga.  
Bridgeport, Conn.  
Mystic, Conn.  
Belmont, N. C.  
Fayetteville, N. C.  
Freeport, N. Y.  
Maplewood, N. J.  
Albemarle, N. C.  
New Rochelle, N. Y.  
Greenwich, Conn.  
Little Rock, Ark.  
Guatemala City, C. A.  
New York, N. Y.  
Reading, Pa.  
Clarksburg, W. Va.  
Miami, Fla.  
Warren, Pa.  
Paw Creek, N. C.  
Miami, Fla.  
Lakewood, Ohio  
Lakewood, Ohio  
Roslyn, N. Y.  
Wilmington, N. C.  
Boone, N. C.  
Shamokin, Pa.  
Winter Garden, Fla.  
Bradford, Pa.  
Durham, N. C.  
Jamaica Estates, N. Y.  
Greenwich, Conn.  
Salisbury, N. C.  
Woodbridge, N. J.  
Durham, N. C.  
Elmhurst, L. I., N. Y.



- Briggs, James Ethelbert  
 Bright, James G.  
 Brinson, Walter Jackson  
 Britt, William C.  
 Brock, Aaron Joseph  
 Brooks, Sidney Barclay  
 Brown, James Madison  
 Buchanan, John C.  
 Bullock, Henry Lehman, Jr.  
 Burk, Robert Stuart  
 Burleson, Robert McClay  
 Bush, Robert Kenneth  
 Bushnell, George D.  
 Byerly, Charles Tate, Jr.  
 Byrd, Robert Curtis  
 Calaway, Bill E.  
 Caldwell, Daniel H.  
 Callahan, Daniel John  
 Calloway, Vern Daniel  
 Campbell, John Robert  
 Carlross, Frank I.  
 Carroll, Harold W.  
 Carson, Richard T.  
 Carter, James E.  
 Carter, Luther J.  
 Cavanaugh, Edward Michael  
 Celley, Albert F.  
 Chamberlin, Frank H.  
 Chambers, Robert Tillman  
 Cheek, Leon Theodore  
 Christakos, Arthur C.  
 Christy, John Holmes  
 Clark, Seymour Garland, Jr.  
 Clarke, Donnelly Royce  
 Clausen, Jay Donald  
 Clowar, John William  
 Coleman, Pat H.  
 Colvin, John T.  
 Conaway, Jack Russell  
 Conner, John C.  
 Cook, Robert D.  
 Cooke, Dennis Hargrove  
 Corn, Donn Edward  
 Costis, Gus Tom  
 Cox, John William  
 Craft, Thomas L.  
 Crigger, Harry George  
 Crimmins, Frank Joseph  
 Croy, Walter Harley  
 Cunningham, Owen K.  
 Cuyler, R. Duncan  
 David, Arthur K., Jr.  
 Davies, Pete J.  
 Deyton, Robert Guy, Jr.  
 Diamond, Gustave  
 Dickson, Robert Eric  
 Dillon, Robert S.  
 DiMona, Anthony John  
 Dixon, James L., Jr.  
 Dorman, Charles T.  
 Drazek, Teofil Albert  
 Drummond, Heyward L.  
 Duncan, Lewis William  
 Dungan, Walter P.  
 Dunklee, Edward F.  
 Edwards, Charles Murphy  
 Edwards, William B.  
 Elliott, Greer Woltz  
 Emes, Edward Louis  
 Elander, John Ellis  
 Eng, George E.  
 Eppley, Ernest Dillard  
 Erickson, John Stuart  
 Erwin, Julian, Jr.  
 Eslick, Jack W.  
 Evans, Thomas Everett  
 Falwein, John James  
 Farinella, Donald Anthony  
 Farmer, A. Alvin  
 Fekas, Paul W.  
 Felker, Clay S.  
 Raleigh, N. C.  
 Rutherford College, N. C.  
 Kenmore, N. Y.  
 Fairmont, N. C.  
 Raleigh, N. C.  
 Wilson, N. C.  
 Miami, Fla.  
 Winstonsboro, S. C.  
 Durham, N. C.  
 Washington, D. C.  
 Johnson City, Tenn.  
 Merchantville, N. J.  
 Winnetka, Ill.  
 Durham, N. C.  
 Ft. Lauderdale, Fla.  
 Winston-Salem, N. C.  
 Blytheville, Ark.  
 West Concord, Mass.  
 Jackson, Miss.  
 Dorchester, Mass.  
 Salem, Ohio  
 Hillsboro, N. C.  
 McKees Rocks, Pa.  
 Durham, N. C.  
 Charlotte, N. C.  
 Waterbury, Conn.  
 Durham, N. C.  
 West Orange, N. J.  
 Fayetteville, N. C.  
 Durham, N. C.  
 Batesburg, S. C.  
 Andrews, N. C.  
 Brooklyn, N. Y.  
 Asheville, N. C.  
 Baltimore, Md.  
 Audubon, N. J.  
 Colonial Heights, Va.  
 Richmond, Va.  
 Parkersburg, W. Va.  
 Baltimore, Md.  
 Baldwin, N. Y.  
 High Point, N. C.  
 Columbus, Ohio  
 Ahsokie, N. C.  
 Mt. Airy, N. C.  
 Bethel, N. C.  
 Fort Sill, Okla.  
 New York, N. Y.  
 Swannanoa, N. C.  
 Honolulu, T. H.  
 Durham, N. C.  
 Jacksonville, Fla.  
 Durham, N. C.  
 Brevard, N. C.  
 Burgettstown, Pa.  
 Arlington, Va.  
 Arlington, Va.  
 Haddonfield, N. J.  
 Kew Gardens, N. Y.  
 Durham, N. C.  
 Springfield, Mass.  
 Norfolk, Va.  
 Durham, N. C.  
 Elizabethton, Tenn.  
 Denver, Colo.  
 Weldon, N. C.  
 Durham, N. C.  
 Durham, N. C.  
 Mt. Vernon, N. Y.  
 Plainfield, N. J.  
 Englewood, N. J.  
 Cramerton, N. C.  
 Bay Shore, L. I., N. Y.  
 Harlan, Ky.  
 Fayetteville, Tenn.  
 Scranton, Pa.  
 Roxbury, Mass.  
 Passaic, N. J.  
 Bolt, W. Va.  
 Hampton, Va.  
 Webster Groves, Mo.

Ferguson, Cortez Wright, Jr.  
 Ferrell, Marshall Carr, Jr.  
 Few, John Francis  
 Fick, William George  
 Fisher, Albert  
 Fisher, Charles Avery  
 Fisher, James Edwin  
 Fisher, John Joseph  
 Fisher, Robert Lee  
 Fleming, Ralph L., Jr.  
 Foster, Zaro Elton  
 Fry, John Sedgwick  
 Fulweiler, Robert Edward  
 Futrell, James Louis  
 Gallagher, Jerold Gray  
 Gardiner, Theodore David  
 Garvine, Richard Earle  
 Gibbs, Raeford  
 Gibson, John D. S.  
 Gilfillan, Charles McGrew  
 Gill, Harold Eugene  
 Glazier, Leland Cole  
 Glenn, Irwin P.  
 Glover, R. Keith  
 Gore, Tom Winfield  
 Gossett, Charles R.  
 Goswick, Claude B.  
 Grace, John V.  
 Graham, Franklin C.  
 Greenberg, Larry  
 Greenberger, Stephen  
 Greene, Albert James  
 Greene, Fred M., Jr.  
 Griffin, Charles Wesley  
 Grisso, John K.  
 Grossnickle, William F.  
 Gumkowski, Thaddeus Raymond  
 Hackney, Ben Hall  
 Hackney, Edwin Atwater  
 Haim, Liam  
 Hale, Joseph Mack  
 Hall, Leslie Marshall, Jr.  
 Hamm, Kyle Edward  
 Hanson, Elmer David  
 Harris, Elisha Carter  
 Harris, John Balle  
 Harris, William Daniel  
 Harrison, Nathaniel Mason, Jr.  
 Harrison, Richard Paige  
 Harvey, Sam L.  
 Hatley, Jimmy Worth  
 Hayes, Kendall Preston  
 Hensel, Richard H. S.  
 Hermance, Donald Lewis  
 Herron, John  
 Hibbits, Josiah Benjamin  
 Higgins, Fred Clay, Jr.  
 High, Sherrill Rae  
 Hill, Hoyt Gray  
 Hodgson, Thomas Salkald  
 Hoey, Franklin James  
 Hogg, William James  
 Holland, Darrell Massey  
 Holyfield, William G., Jr.  
 Hubbs, Richard E.  
 Hudgins, Walter Edward  
 Hudson, Isham B.  
 Huggins, Theodore Pollard  
 Hughes, Thomas P.  
 Huntsberry, Charles Robert  
 Hussey, W. H.  
 Hyatt, Edward  
 Ingram, George Stephen  
 Jacobsen, Magne Andrew  
 James, Carl Clifton  
 Johnson, Harry Wallace  
 Johnson, Lee  
 Johnson, Peter Paul  
 Johnston, Cyrus Conrad, Jr.  
 Jones, Charles Albert  
 Greensboro, N. C.  
 Petersburg, Va.  
 Greensboro, N. C.  
 Passaic, N. J.  
 Fairmont, N. C.  
 Canton, N. C.  
 Durham, N. C.  
 Prospectville, Pa.  
 Grosse Pointe, Mich.  
 Portsmouth, Va.  
 Harmony, N. C.  
 Philadelphia, Pa.  
 Columbia, Pa.  
 Greenville, N. C.  
 Fair Haven, N. J.  
 Alfred, N. Y.  
 Wilmington, Del.  
 Asheville, N. C.  
 Chevy Chase, Md.  
 Trenton, N. J.  
 Jacksonville, Fla.  
 Petersburg, Va.  
 Burlington, N. C.  
 Bailey, N. C.  
 Haleyville, Ala.  
 Arlington, Va.  
 Durham, N. C.  
 Cobleskill, N. Y.  
 Oaklyn, N. J.  
 Atlanta, Ga.  
 Morris Plains, N. J.  
 Forest Hill, N. Y.  
 Philadelphia, Pa.  
 Greensboro, N. C.  
 Alexandria, Va.  
 Nutley, N. J.  
 Branford, Conn.  
 Lucama, N. C.  
 Charlotte, N. C.  
 Yonkers, N. Y.  
 Windsor, N. C.  
 Cradock, Va.  
 West Palm Beach, Fla.  
 Massillon, Ohio  
 Durham, N. C.  
 Albemarle, N. C.  
 Charlotte, N. C.  
 High Point, N. C.  
 Norfolk, Va.  
 Jacksonville, N. C.  
 Albemarle, N. C.  
 Park Ridge, Ill.  
 Jersey City, N. J.  
 Washua, N. H.  
 St. Petersburg, Fla.  
 Nashville, Tenn.  
 Rome, Ga.  
 Durham, N. C.  
 Bowling Green, Ky.  
 Bronxville, N. Y.  
 Wilmington, Del.  
 Maywood, N. J.  
 Raleigh, N. C.  
 Roanoke, Va.  
 Bradley Beach, N. J.  
 Danville, Va.  
 Andrews, N. C.  
 Danville, Va.  
 Sumter, S. C.  
 Winchester, Pa.  
 Weaverlyville, N. C.  
 Asheville, N. C.  
 Jacksonville, Fla.  
 Plainfield, N. J.  
 Raleigh, N. C.  
 Weldon, N. C.  
 Weldon, N. C.  
 W. Cranford, N. J.  
 Mooresville, N. C.  
 Charlotte, N. C.

Jones, Douglas Johnson  
 Jones, John O.  
 Jones, Robert Quince  
 Jordan, Benjamin Everett, Jr.  
 Jurew, John C.  
 Katzenmeyer, William G.  
 Kay, Toombs Hodges, Jr.  
 Kayler, Ralph Earl  
 Kelley, Kenneth C., Jr.  
 Kelly, Walter Richard, Jr.  
 Kenion, Eugene Grant  
 Kennard, Francis M., Jr.  
 Kennedy, James Arthur  
 Kersey, James Stuart  
 King, Robert David  
 King, William Payne  
 Kingery, Robert Elliott  
 Kirchofer, Roger Beeson  
 Klees, Robert Edwin  
 Klein, Lewis Philip, Jr.  
 Knotts, Den Morton  
 Koestline, Charles N.  
 Kuman, Arthur  
 Kuman, Herbert  
 Laundau, Edward Jay  
 Landon, Horace  
 Landrum, Clinton Terrell, Jr.  
 Landstrom, John Badgley  
 Lane, Benjamin Forrest  
 Lang, William Steve, Jr.  
 Lanning, Jeremy Cushman  
 Larson, Paul Ernest  
 Lawter, Gene Lamar  
 Lee, James Edward  
 Lee, John Marshall, Jr.  
 Lee, Raymond William, Jr.  
 LeGore, Norman Chester  
 Leonard, Joe Gaither  
 Lewis, Robert Dobbins  
 Linaweaver, Paul Glenwood, Jr.  
 Lindsey, John Morton  
 Loehr, John Lyle  
 Lounsbury, Richard Earl  
 Lucas, Charles Fred  
 Lugenbeel, Archie G., Jr.  
 Lynch, Hal Lancaster, Jr.  
 McCauley, Thomas H.  
 McConnell, Elliott Bonnell, Jr.  
 McCraw, Ray Clifton  
 McDougald, Robert Eubanks  
 McFadden, Robert Lawrence  
 McGranahan, Fred Nelson, Jr.  
 McGranahan, William Scott, Jr.  
 McIver, Douglas C.  
 McLaulin, Johnnie C., Jr.  
 McLendon, P. A.  
 McLennan, Louis Watson  
 McLeod, Robert Franklin  
 McMahon, James Gillman, Jr.  
 McMaster, Fitz-John Creighton  
 Mabry, Henry Filmore  
 Macfarlane, John Granger  
 Mairs, Robert Louis  
 Manegan, Warren R.  
 Marjenhoff, August John  
 Martin, Richard Charles  
 Masteller, Daryl Edwin  
 Mathers, Robert Wesley  
 Matheson, James Leonard  
 Mathis, Archie M., Jr.  
 Mauney, Edgar Alonzo, Jr.  
 Mauney, William Shayle  
 Maxwell, John Wallace  
 Meredith, Winfield Scott  
 Millard, Robert Fred  
 Miller, Jack Upshaw  
 Miller, Neal Donald  
 Mitchell, Fred L.  
 Mitchell, William Edward  
 Moore, Burt Hitchcock  
 Moore, William Travis  
 Southport, N. C.  
 Saluda, S. C.  
 Charleston, W. Va.  
 Saxapahaw, N. C.  
 Bloomfield, N. J.  
 Grand Rapids, Mich.  
 Royston, Ga.  
 Gastonia, N. C.  
 Sharpsville, Pa.  
 Asheboro, N. C.  
 Hillsboro, N. C.  
 Rising Sun, Md.  
 Pittsburgh, Pa.  
 Durham, N. C.  
 Washington, D. C.  
 Memphis, Tenn.  
 White Plains, N. Y.  
 Raleigh, N. C.  
 Tuckahoe, N. Y.  
 Philadelphia, Pa.  
 Albemarle, N. C.  
 Albemarle, N. C.  
 Alfred, N. Y.  
 Alfred, N. Y.  
 Mt. Vernon, N. Y.  
 Eden, N. Y.  
 Palmyra, Pa.  
 Rockford, Ill.  
 Mullins, S. C.  
 Savannah, Ga.  
 Rockingham, N. C.  
 Emporium, Pa.  
 Inman, S. C.  
 Durham, N. C.  
 Walterboro, S. C.  
 Providence Forge, Va.  
 Vineland, N. J.  
 Catawba, N. C.  
 Asheville, N. C.  
 Chesterbrood, Va.  
 Montrose, N. Y.  
 Rochester, N. Y.  
 Seymour, Conn.  
 Nashville, Tenn.  
 Durham, N. C.  
 Jacksonville, Fla.  
 Durham, N. C.  
 Shaker Heights, Ohio  
 Glen Rock, N. J.  
 Bayside, N. Y.  
 Rock Hill, S. C.  
 Durham, N. C.  
 Durham, N. C.  
 Winston-Salem, N. C.  
 Danville, Va.  
 Washington, D. C.  
 Atlanta, Ga.  
 Southern Pines, N. C.  
 Wilmington, Del.  
 Winnsboro, S. C.  
 Greensboro, N. C.  
 Chevy Chase, Md.  
 Charleston, W. Va.  
 Durham, N. C.  
 Charleston, S. C.  
 Brooklyn, N. Y.  
 Asheboro, N. C.  
 Miami, Fla.  
 Mount Gilead, N. C.  
 Rocky Mount, N. C.  
 Lincolnton, N. C.  
 Maiden, N. C.  
 Bethesda, Md.  
 Jamestown, N. Y.  
 Bristol, Tenn.  
 Coral Gables, Fla.  
 Hummelstown, Pa.  
 Chattanooga, Tenn.  
 Lynbrook, N. Y.  
 Raleigh, N. C.  
 Durham, N. C.

Morgan, Everette Lee  
 Morris, Thomas Wendell  
 Moser, Daniel Boone  
 Mougey, Paul Howard  
 Mounie, John Robert, Jr.  
 Mullinix, Howard Earl, Jr.  
 Mundy, Elbert Johnson, Jr.  
 Murray, John Poole  
 Nabors, James Joseph  
 Nania, Frank  
 Neal, Charles Bodine  
 Nicholson, James Lloyd, Jr.  
 Nicholson, William Edward  
 Northam, Richard Alan  
 Novick, Marshall Irwin  
 Obarrio, Gabriel R. de  
 Ocker, John McClellan  
 O'Leary, James J.  
 Orr, Harry Allen  
 Orzano, Randel M.  
 Osborn, Robert Emerson  
 Oster, Howard Stanton  
 Overdorff, James V.  
 Owen, Edsel M.  
 Pagter, Amos Townsend, Jr.  
 Palmer, Kenneth F.  
 Pate, Robert Bruce  
 Paulsen, C. Richard  
 Pearce, Robert McAfee  
 Peele, Warren Dozier  
 Perkinson, Seth Jones  
 Perry, Thomas R.  
 Peterson, Robert T., Jr.  
 Poole, Elliott Bruce  
 Poston, Howard H., Jr.  
 Powers, Noyes Thomas  
 Prairie, Robert Lyle  
 Price, Charles Russell  
 Propst, Arnold M.  
 Pullen, Dale D.  
 Pullen, Irving Wendell  
 Purves, Richard Eugene  
 Putnam, John Graves, Jr.  
 Pyle, Robert Henry  
 Query, Erwin Leavitt  
 Ramsaur, Edmund G., Jr.  
 Ray, Herbert Howard  
 Read, W. M., III  
 Reardin, Charles R., Jr.  
 Reep, Bryan Rufus  
 Reeves, Thomas Charles  
 Register, Robert Thomas, Jr.  
 Renfrow, Leslie Horace  
 Ressler, Duane W.  
 Reynolds, Raymond Earl  
 Rhodes, Dean  
 Rice, William Elbert  
 Rice, William Henry  
 Rickard, Robert Stanley  
 Rogers, William Plummer  
 Rose, Carl P.  
 Rose, C. A.  
 Roseberry, Philip Leon  
 Rosenberg, Dietrich F.  
 Rosenbert, Robert Harold  
 Ross, James V.  
 Ross, John Joseph  
 Rostad, Ole Magnus  
 Roth, Arnold I.  
 Rucks, Percy Osborne  
 Salomon, Ferdinand Lewis  
 Sandefur, Earl Wilton  
 Schiffli, Nicholas William  
 Seaton, Edwin C.  
 Shackelford, Robert Glenn  
 Shapiro, Herbert S.  
 Shelley, George LeRoy, III  
 Sherrill, Frank Carlyle, III  
 Sherrill, Tobias A.  
 Shore, George E.  
 Shulsinger, Joseph

Spencer, N. C.  
 Durham, N. C.  
 Gastonia, N. C.  
 Chevy Chase, Md.  
 Portsmouth, Va.  
 Severn Park, Md.  
 Jacksonville, Fla.  
 Camden, N. J.  
 Winfield, Ala.  
 Middletown, N. Y.  
 Millville, N. J.  
 Raleigh, N. C.  
 Winston-Salem, N. C.  
 Wilmington, Del.  
 Winchester, Va.  
 Panama, P. R.  
 Arlington, Va.  
 New Brunswick, N. J.  
 Greenville, S. C.  
 Baldwin, N. Y.  
 West Orange, N. J.  
 Ashland, W. Va.  
 Johnstown, Pa.  
 Burkeville, Va.  
 Washington, D. C.  
 Crystal Hill, Va.  
 LaGrange, N. C.  
 Shorewood, Wis.  
 Shelbyville, Ky.  
 Fountain, N. C.  
 Asheville, N. C.  
 Shenandoah, Pa.  
 Rutherford, Tenn.  
 Jamesburg, N. J.  
 Kingstree, S. C.  
 Cumberland, Md.  
 Durham, N. C.  
 Summerville, S. C.  
 Maiden, N. C.  
 Miami, Fla.  
 Claremont, N. H.  
 Washington, D. C.  
 Buffalo, N. Y.  
 N. Muskegon, Mich.  
 Durham, N. C.  
 Lincoln, N. C.  
 Winston-Salem, N. C.  
 Maywood, N. J.  
 Ridgewood, N. J.  
 Raleigh, N. C.  
 Charleston, W. Va.  
 Baltimore, Md.  
 Lucama, N. C.  
 Durham, N. C.  
 Penns Grove, N. J.  
 Columbia, S. C.  
 Duncan, Ariz.  
 Macon, Ga.  
 East Orange, N. J.  
 Charleston, S. C.  
 Rocky Mount, N. C.  
 Wilmington, N. C.  
 York, Pa.  
 Binghamton, N. Y.  
 Newton Centre, Mass.  
 Easton, Pa.  
 Jacksonville, Fla.  
 Oslo, Norway  
 Birmingham, Ala.  
 Wilsons, Va.  
 Morristown, N. J.  
 Winston-Salem, N. C.  
 Clewiston, Fla.  
 Manitowoc, Wis.  
 High Point, N. C.  
 Augusta, Ga.  
 Bristol, Conn.  
 Cornelius, N. C.  
 Greensboro, N. C.  
 Winston-Salem, N. C.  
 Springfield Gardens, N. Y.

- Silkett, Robert T.  
 Simidian, Ara Vahan  
 Simmons, Bowen Eugene  
 Simpson, James Walter  
 Sirois, Richard A.  
 Skibsted, Wesley George  
 Slane, John Clark  
 Sledge, John Burton, Jr.  
 Sliker, Alan William  
 Slocumb, Marvin B.  
 Slone, Harry Lee  
 Smith, Fred R.  
 Smith, John Newton, Jr.  
 Smith, Micah, Jr.  
 Smith, Richard Bowden  
 Smith, Sterling Lee  
 Smith, William Monroe  
 Smitherman, Frank B., Jr.  
 Snively, Lawrence W., Jr.  
 Snow, John W.  
 Solomon, James Russell  
 Souchak, Michael  
 Spann, Guy Stewart  
 Spillman, Harry Lawrence  
 Stamey, Ben Franklin  
 Stapleford, Robert Wayne  
 Starnes, Paul B.  
 Starnes, Philip J.  
 Steagall, Robert Worth  
 Sterling, Lehman N.  
 Steuer, Arthur H.  
 Stokes, Frank Stewart  
 Strader, R. Harold  
 Strasser, Richard I.  
 Street, John S.  
 Stride, Richard J.  
 Stringer, Arthur John  
 Strott, John William  
 Sublett, Henry L., Jr.  
 Sullivan, Edward J.  
 Sumara, Charles K. George  
 Swain, William A.  
 Sykes, John Howard  
 Tager, Henry Clay  
 Tapley, John Mark  
 Taylor, Creed B.  
 Taylor, James I.  
 Taylor, Kenneth M.  
 Terpenning, George C.  
 Terry, Isaac Holt, Jr.  
 Thigpen, Richard Elton, Jr.  
 Thomas, Richard L.  
 Thomas, Robert C.  
 Thompson, Blaine Calvin  
 Throckmorton, Charles Withers, III  
 Tippy, Harold G.  
 Toms, Edgar Shelton, Jr.  
 Toms, George Newby  
 Townsend, James Joye  
 Trevett, William Stuart, Jr.  
 Tu, Tien Chung  
 Tucker, Donald W.  
 Tulenko, Thomas Steve  
 Tybout, Frederick Alton  
 Tyson, Tommy  
 Underwood, George Dewey, Jr.  
 Underwood, Jack Lawrence  
 Upchurch, Joseph Daniel  
 Van Der Beck, Karl  
 Van Skike, Robert Bruce, Jr.  
 Veith, Frank H.  
 Viau, Louis John, Jr.  
 Viggiano, Dante  
 Wadlington, Walter James  
 Wagner, R. W.  
 Walker, Donald  
 Walrond, Alan Lambert  
 Wamsley, Frank S.  
 Ware, Henry Neill  
 Warmath, John Thomas, Jr.  
 Warren, Harold Flack  
 Silver Spring, Md.  
 Forest Hills, N. Y.  
 Opp, Ala.  
 Charlotte, N. C.  
 Portland, Maine  
 Miami, Fla.  
 High Point, N. C.  
 Rich Square, N. C.  
 Sabina, Ohio  
 Macon, Ga.  
 Salem, Va.  
 Lynn, Mass.  
 Wilmington, N. C.  
 Clover, S. C.  
 Durham, N. C.  
 Winston-Salem, N. C.  
 Lenoir, N. C.  
 Winston-Salem, N. C.  
 Ben Avon, Pa.  
 Gainesville, Fla.  
 Ft. Wayne, Ind.  
 Berwick, Pa.  
 Plant City, Fla.  
 Charlotte, N. C.  
 Lawndale, N. C.  
 Durham, N. C.  
 Charlotte, N. C.  
 Charlotte, N. C.  
 Charlotte, N. C.  
 Broomall, Pa.  
 Miami, Fla.  
 Portsmouth, Va.  
 Reidsville, N. C.  
 New York, N. Y.  
 Chillicothe, Ohio  
 Saco, Maine  
 Mt. Lakes, N. J.  
 Baltimore, Md.  
 Danville, Va.  
 Riverside, N. J.  
 Williamston, N. C.  
 Asheville, N. C.  
 Burlington, N. C.  
 Durham, N. C.  
 New Rochelle, N. Y.  
 Poplar Hill, Va.  
 Tarboro, N. C.  
 Statesville, N. C.  
 New Rochelle, N. Y.  
 Bahama, N. C.  
 Charlotte, N. C.  
 Wallingford, Conn.  
 Little Neck, N. Y.  
 Cleveland, Ohio  
 Richmond, Va.  
 Mt. Lakes, N. J.  
 Durham, N. C.  
 Durham, N. C.  
 Jacksonville, Fla.  
 Richmond, Va.  
 Honan, China  
 Durham, N. C.  
 Washington, D. C.  
 Wilmington, Del.  
 Durham, N. C.  
 Holland, Va.  
 Albany, N. Y.  
 Angier, N. C.  
 East Orange, N. J.  
 Bradenton, Fla.  
 Philadelphia, Pa.  
 New Orleans, La.  
 Panama City, R. P.  
 Biloxi, Miss.  
 New Orleans, La.  
 Wollaston, Mass.  
 Durham, N. C.  
 Tulsa, Okla.  
 Falls Church, Va.  
 Greensboro, N. C.  
 Merchantville, N. J.



Webb, Richard Davis  
 Webster, Frank Morris  
 Weekley, Augustine S., Jr.  
 Weidman, John C.  
 Welsh, John F.  
 Westhall, James Edmund  
 Wheaton, Scott Rodgers  
 White, Edgar Farrell  
 White, Frank Paul  
 White, Johnnie Robert, III  
 White, William F., Jr.  
 Whitener, Fred William  
 Whitney, James Lloyd  
 Wilder, B. Joe  
 Wile, H. Wayne  
 Wiles, Ben M.  
 Williams, Martin G., Jr.  
 Winters, Albert Cornelius, Jr.  
 Witherspoon, Loy Hahn  
 Withrow, Pat Berry, III  
 Wolfe, Thomas Redwine  
 Womble, William Lansden  
 Wood, William Clark  
 Wood, William M.  
 Wooten, Shade Isler  
 Yongue, Robert Eugene, III  
 York, Scott R.  
 Young, James Morningstar  
 Young, Robert Everett

Mamaroneck, N. Y.  
 Durham, N. C.  
 Durham, N. C.  
 Rosemont, Pa.  
 Arlington, Va.  
 Lakewood, N. J.  
 Stroudsburg, Pa.  
 Concord, N. C.  
 Unadilla, N. Y.  
 Danville, Va.  
 Merritt Island, Fla.  
 Durham, N. C.  
 Parkersburg, W. Va.  
 Daytona Beach, Fla.  
 Patrolia, Pa.  
 Burlington, N. C.  
 Jacksonville Beach, Fla.  
 Williamsport, Pa.  
 Winston-Salem, N. C.  
 Charleston, W. Va.  
 Albemarle, N. C.  
 Winter Haven, Fla.  
 Greenwich, Conn.  
 Norfolk, Va.  
 Biltmore, N. C.  
 Laurinburg, N. C.  
 Cleveland, Ohio  
 Massillon, Ohio  
 Charleston, W. Va.

## SPECIAL STUDENTS

Baptiste, Ronald B.  
 Barker, Seaman Welson  
 Batten, John Edward  
 Brown, Edward B.  
 Burrell, E. J., Jr.  
 Carroll, Douglas Stewart  
 Curry, John Robert, Jr.  
 Dozier, Laurie Lester, Jr.  
 Evans, Paul Franklin, Jr.  
 Fairey, Robert Lewis  
 Garriss, William Philip  
 Gatling, William Gladstone  
 Gibson, James Edward, Jr.  
 Good, Norman Burke, Jr.  
 Grady, John Bertram  
 Hallett, James S.  
 Holland, Bobby Fagan  
 Jeffer, Herman Matthew  
 Jones, Ethrager Felton  
 Kirsh, Marvin  
 Levin, Burton E.  
 McColley, Charles S.  
 Malcolm, H. G.  
 Maness, Howard Fletcher  
 Oberc, L. W. G.  
 Oliver, James Clayton  
 Patterson, Daniel Watkins  
 Pike, Robert E.  
 Price, Richard Glenn, Jr.  
 Schacter, Jerome Miles  
 Schwarz, Robert J.  
 Seitz, R. M.  
 Self, Luther Winborne  
 Smart, Hugh  
 Steele, James G.  
 Steele, Richard Austin  
 Strother, Paul Nelson, Jr.  
 Turner, Malcolm E., Jr.  
 Wertman, Jay Calvin  
 Wright, Eugene B., Jr.  
 Wright, John Dean

Hong Kong, China  
 Golden Beach, Fla.  
 Welch, W. Va.  
 Scranton, Pa.  
 Durham, N. C.  
 Asheville, N. C.  
 High Point, N. C.  
 Tallahassee, Fla.  
 Lexington, N. C.  
 Durham, N. C.  
 Wadesboro, N. C.  
 Durham, N. C.  
 Winston-Salem, N. C.  
 Harrisburg, Va.  
 Greensboro, N. C.  
 Spewfish, S. D.  
 Statesboro, Ga.  
 Midland Park, N. J.  
 Durham, N. C.  
 Clover, S. C.  
 Fishkill, N. Y.  
 Rock Hill, S. C.  
 Durham, N. C.  
 Greensboro, N. C.  
 Durham, N. C.  
 Asheboro, N. C.  
 Greensboro, N. C.  
 Jenkintown, Pa.  
 Greer, S. C.  
 Durham, N. C.  
 Chatham, Newfoundland  
 Hersburck, Germany  
 Greensboro, N. C.  
 Lachine, Canada  
 Chillicothe, Ohio  
 Asheville, N. C.  
 Stantonburg, N. C.  
 Durham, N. C.  
 Baltimore, Md.  
 Clarksburg, W. Va.  
 Raleigh, N. C.

*College of Engineering*

## SOPHOMORE CLASS

Agronis, Gilbert Andrew  
 Andon, Neil George  
 Austin, Edward R.  
 Avera, David Sander, Jr.  
 Bartholomer, Bradley White  
 Baur, Raymond II., Jr.  
 Bennett, Guy Hibert, Jr.  
 Bixby, Richard Glenn  
 Blizard, J. Walter F., Jr.  
 Bourne, Philip Barry  
 Broom, Phillip Ward  
 Brown, Bruce MacDonald  
 Carver, John Raymond  
 Cates, Gene H.  
 Caudill, Howard D.  
 Chamberlain, Wallace James  
 Climenson, William Douglas  
 Connor, Lyle B.  
 Coppala, George Harrill  
 Craig, John Bradford  
 Ehrhardt, Stephen John  
 Faunce, John P.  
 Fowler, John Thomas, Jr.  
 Gross, Kenneth E.  
 Grove, Gordon V.  
 Hammerberg, Charles M.  
 Heckert, Richard John  
 Holbrook, James Edwin, Jr.  
 Holder, Howard Eugene  
 Hood, Ray S.  
 Horton, Raymond Earl  
 Hulse, James E.  
 Hussey, George F., III  
 James, Gene L.  
 Johnson, Robert Bachman  
 Jones, Charles Sherty  
 Kasey, Douglas Eugene  
 Katzinski, Emil Fred  
 Kehler, Gerard Evan  
 Kennedy, Kermit Doyle  
 Lyon, Carlos Marshall  
 MacEwen, Wallace Scott  
 McGiehan, Donn  
 McLlin, William D.  
 Meyer, Warren Edward  
 Murphy, Herbert James, Jr.  
 Mylrea, Bruce William  
 Nelson, Forrest Eugene  
 Parker, David Preston  
 Peterson, David Matthew  
 Pierry, Robert Francis  
 Potter, Louis Kirby  
 Powell, Ernest C., Jr.  
 \*Rathbun, Donald Allison  
 Reed, Marshall Foster, Jr.  
 Reid, Wiley G.  
 Riker, Rodney Moore, Jr.  
 Rinaldi, Roger Emerson  
 Riquezes, Jose Rafael  
 Rudgc, William Jerome, III  
 Rumer, Ralph Raymond  
 Rutter, Donald Harris  
 Sarles, Frederick Williams, Jr.  
 Saylor, John H.  
 Schafroth, Douglas Werner  
 Schieber, Richard M.  
 Schmidt, Roland Andrew  
 Seyfert, Joseph Harold, Jr.  
 Shaw, Charles Powell, Jr.  
 Shipp, William Beasley  
 Shufelt, Charles Emery  
 Smith, John Edward  
 Spelman, Stewart R.  
 Spencer, James Y.  
 \* Died October 22, 1950.

Bridgeport, Conn.  
 Elmhurst, N. Y.  
 Charlotte, N. C.  
 Winston-Salem, N. C.  
 Charlotte, N. C.  
 Miami, Fla.  
 Durham, N. C.  
 Detroit, Mich.  
 Jenkintown, Pa.  
 Lakewood, N. Y.  
 Monroe, N. C.  
 Germantown, Phila., Pa.  
 Hume, Mo.  
 Richmond, Va.  
 Goldsboro, N. C.  
 Grand Rapids, Mich.  
 Lancaster, Pa.  
 Bryantville, Mass.  
 Charlotte, N. C.  
 Pittsburgh, Pa.  
 Babylon, N. Y.  
 Durham, N. C.  
 Rutherfordton, N. C.  
 York, Pa.  
 Dayton, Ohio  
 McKeesport, Pa.  
 Youngstown, Ohio  
 Durham, N. C.  
 Andrews, N. C.  
 Fort Pierce, Fla.  
 Norfolk, Va.  
 Durham, N. C.  
 Norwalk, Conn.  
 Newark, N. J.  
 Drexel Hill, Pa.  
 Washington, D. C.  
 Martinsville, Va.  
 Hempstead, N. Y.  
 Ashland, Pa.  
 Durham, N. C.  
 Decatur, Ill.  
 Durham, N. C.  
 Hartsdale, N. Y.  
 Gardner, Mass.  
 Rochester, N. Y.  
 Newark, Ohio  
 Chester, Pa.  
 Charlotte, N. C.  
 Durham, N. C.  
 Elmhurst, L. I., N. Y.  
 Teaneck, N. J.  
 Patchogue, L. I., N. Y.  
 Durham, N. C.  
 Tampa, Fla.  
 South Brightwater, N. Y.  
 Durham, N. C.  
 Rockville Centre, N. Y.  
 North Bergen, N. J.  
 Caracas, Venezuela  
 Lenox, Mass.  
 Bloomsburg, Pa.  
 Baltimore, Md.  
 Greensboro, N. C.  
 Durham, N. C.  
 Hayertown, Pa.  
 Sarasota, Fla.  
 Pikesville, Md.  
 Philadelphia, Pa.  
 Ridley Park, Pa.  
 Durham, N. C.  
 High Point, N. C.  
 Huntington, W. Va.  
 Rockville Centre, N. Y.  
 Winston-Salem, N. C.

Staton, Marshall  
 Stephenson, Paul Dwight  
 Stockdale, Ralph W.  
 Stout, Edward B.  
 Streeter, Richard N.  
 Suit, James Ray  
 Sweetou, Richard Frederick  
 Tarnow, Lawrence M.  
 Tucker, Royster Milton  
 Vaughn, Stuart H.  
 Walker, Clarence Elmer  
 Warden, Richard V.  
 Waser, Charles Willard  
 Woodfield, Richard Thomas  
 Wooslayer, Joe Robert  
 Wright, William Vaughn

Wadesboro, N. C.  
 Wadesboro, N. C.  
 Rockford, Ill.  
 Greensboro, N. C.  
 Belleville, N. J.  
 Creedmoor, N. C.  
 Haddonfield, N. J.  
 Rochester, N. Y.  
 High Point, N. C.  
 Detroit, Mich.  
 Durham, N. C.  
 Beaufort, N. C.  
 Winston-Salem, N. C.  
 Washington, D. C.  
 Tulsa, Okla.  
 Greensboro, N. C.

JUNIOR CLASS

Anderson, Jack Cathey  
 Ballard, William Ed  
 Barnes, Donald Alfred  
 Barrett, Alfred James, Jr.  
 Barry, Earnest Harry  
 Batten, Emmett LeGrey  
 Blackwell, LeRoy Erlinson, Jr.  
 Bolick, Harold D.  
 Bolton, Norman Arthur  
 Brice, Charles Carol  
 Brown, Walter Louis  
 Butt, S. Page  
 Campbell, Charles Newton  
 Carver, Marvin J., Jr.  
 Chappell, William Henry  
 Collins, Howard W.  
 Collins, William George  
 Copes van Hasselt, Frederick W.  
 Cote, Daniel Narcisse  
 Cousins, Matthew E., III  
 Daniel, Eugene Thomas  
 Davis, Hubert Vincent, Jr.  
 Detwiler, George D.  
 Dieffenbach, Otto Weaver, Jr.  
 Downey, Thomas Dickson  
 Edelblute, Thomas Hastings, Jr.  
 Eure, Thomas Duncau  
 Fishburne, Charles Carroll  
 Franklin, Andrew Jackson, III  
 Hail, Joe James, Jr.  
 Hall, John Woosley  
 Harvey, Frank H.  
 Houck, Frederic Ronald  
 Huffer, Nicholas Robinson  
 Hwang, Chester Fay  
 Johnson, Kenneth Raymond  
 Jones, Simeon Broadus, Jr.  
 Joyner, Edward Madison  
 Kennedy, Joe Everett, Jr.  
 Kennedy, Theodore Clifford  
 Korbelt, Edward Joseph  
 Kraeuter, Lincoln David  
 Lee, Hugh (You)  
 Lloyd, Kenneth Earl Cooper  
 Makris, John Evangelus  
 Marlin, Glenn Adrian  
 Marple, Thomas Pankey  
 McMillan, Marcus  
 McMullan, Philip Sidney, Jr.  
 McRae, William Davis  
 Morton, Gerald Ketchum  
 Murray, Malcolm Gibson, Jr.  
 Neal, Ralph John  
 Nelson, Burnham  
 Parrish, Edwin C.  
 Pavloff, George  
 Peake, Frank Ernell, Jr.  
 Petruchik, Peter  
 Pritchard, Robert Harrison, Jr.  
 Probert, Kenneth Denton  
 Proctor, Dan Moore  
 Pyle, Gordon D.

Durham, N. C.  
 White Sulphur Sp'ngs, W. Va.  
 Larchmont, N. Y.  
 Washington, D. C.  
 Baltimore, Md.  
 Durham, N. C.  
 Miami, Fla.  
 Burlington, N. C.  
 Cleveland Heights, Ohio  
 Annapolis, Md.  
 Clarkton, N. C.  
 Pleasantville, N. Y.  
 Carrboro, N. C.  
 Rougemont, N. C.  
 Durham, N. C.  
 Newark, Ohio  
 Long Island City, N. Y.  
 Montreal, Canada  
 Silver Spring, Md.  
 Enfield, N. C.  
 Durham, N. C.  
 Bloomfield Hills, Mich.  
 Collegeville, Pa.  
 Ruxton, Md.  
 Haddonfield, N. J.  
 Reynoldsville, Pa.  
 Beaufort, N. C.  
 Asheville, N. C.  
 Goldsboro, N. C.  
 Richmond, Va.  
 High Point, N. C.  
 Durham, N. C.  
 Carlisle, Pa.  
 Toledo, Ohio  
 Arlington, Va.  
 Pensacola, Fla.  
 Hope Mills, N. C.  
 Richmond, Va.  
 Durham, N. C.  
 Mobile, Ala.  
 Douglaston, N. Y.  
 West Orange, N. J.  
 Philadelphia, Pa.  
 Durham, N. C.  
 Newark, Ohio  
 Struthers, Ohio  
 Haddonfield, N. J.  
 Larchmont, N. Y.  
 Edenton, N. C.  
 DeLand, Fla.  
 Durham, N. C.  
 Ellwood City, Pa.  
 Durham, N. C.  
 Grosse Pointe, Mich.  
 Durham, N. C.  
 Munhall, Pa.  
 Arlington, Va.  
 Franklin, N. J.  
 Arlington, Va.  
 Kingsville, Md.  
 Durham, N. C.  
 Interlaken, N. J.

Reeves, Jerry Healand, III  
 Richards, Donald Boyd  
 Sally, John Lea  
 Scholley, George Gifford  
 Seelcy, Ralph Marion  
 Shain, Edwin  
 Shelby, Wallace McDowell  
 Shipley, Joe M.  
 Stecker, Claude Earl  
 Stevlingson, Wheldon Fletcher  
 Stokes, William Alvis  
 Stone, John William  
 Strain, Delbert Earl  
 Taylor, James Charles  
 Tepe, Louis Charles  
 Thompson, Richard Franklin  
 Tollefsen, Robert N.  
 Tracey, Preston Joseph  
 Walker, Robert Johnstone  
 Watkins, John Kenneth, Jr.  
 Westervelt, Sheldon  
 Whitley, Clyde Thomas  
 Winkler, Hubert Erwin  
 Winters, Ralph Moules, Jr.  
 Wise, Walter Robertson

Greenville, S. C.  
 Akron, Ohio  
 Durham, N. C.  
 Hudson, Ohio  
 Candor, N. Y.  
 Wilmington, N. C.  
 Maplewood, N. J.  
 Johnson City, Tenn.  
 Durham, N. C.  
 Kennewick, Wash.  
 Durham, N. C.  
 Raleigh, N. C.  
 Aurora, Mo.  
 Washington, D. C.  
 Englewood, N. J.  
 Warren, Ohio  
 Staten Island, N. Y.  
 Durham, N. C.  
 West Franklin, N. H.  
 Durham, N. C.  
 Oradell, N. J.  
 Siler City, N. C.  
 Lenoir, N. C.  
 Bronxville, N. Y.  
 Durham, N. C.

## SENIOR CLASS

Autry, Elwin Benjamin  
 Bailey, Raymond Bronson  
 Borst, Robert M.  
 Bowers, Gilmore  
 Bradbury, William Chase  
 Browne, Thomas B.  
 Bukowitz, Marvin David  
 Bush, Chandler M.  
 Cannon, Kenneth F., Jr.  
 Carpenter, Harry Everett, Jr.  
 Cates, Walter Elmer  
 Chrisfield, Norman E.  
 Christy, Jack Smith  
 Colenda, Herbert F.  
 Combs, Richard L.  
 Cook, Harold Jacob, Jr.  
 Cooley, Irwin David  
 Corbett, Howard Roger, Jr.  
 Cressman, Robert Allen  
 Dellinger, David C.  
 Denton, Robert Hurd, Jr.  
 Duttweiler, Charles  
 Eisaman, Jack V.  
 Eisenbrandt, Fred Henry, Jr.  
 Fenner, William Eaton  
 Fiegel, Harvey E.  
 Fischell, Robert Ellentuch  
 Fox, Edgar C., Jr.  
 Frame, Norman R., Jr.  
 Friedman, Burnam I.  
 Fritz, Edmund William  
 Fullerton, John Carr, Jr.  
 Grove, Charles David  
 Hankins, William Edward, Jr.  
 Harward, Ernest David  
 Hill, David William  
 Hooper, Ralph Leroy  
 James, William E.  
 Johnson, Clarence Anthony  
 Kastrinolis, Peter L.  
 Kenaston, Robert Allen  
 Komlosi, Eugene James  
 Landis, Harold Hamilton  
 Lanning, Richard L.  
 Lord, Melvin Henry  
 Lowe, Ellwyn Hardin  
 Lucas, Charles D.  
 Lucas, David Michael  
 Maass, William H.  
 MacDonald, Alan Gray  
 Macht, Stuart Martin  
 Martin, John Daniel  
 McCall, Loyd H., Jr.

Durham, N. C.  
 Bristol, Conn.  
 Bryn Mawr, Pa.  
 Winston-Salem, N. C.  
 Hopedale, Mass.  
 Cherryville, N. C.  
 Baltimore, Md.  
 Willoughby, Ohio  
 Washington, D. C.  
 Newton, N. C.  
 Durham, N. C.  
 Gilbertsville, N. Y.  
 Lake Village Ark.  
 Morehead City, N. C.  
 Shaker Heights, Ohio  
 Floral Park, N. Y.  
 Savannah, Ga.  
 Wilmington, N. C.  
 Columbus, Ohio  
 Cherryville, N. C.  
 Washington, D. C.  
 Ridgewood, N. Y.  
 Durham, N. C.  
 Baltimore, Md.  
 Rocky Mount, N. C.  
 Wisconsin Rapids, Wis.  
 New York, N. Y.  
 Rockville Centre, N. Y.  
 New York, N. Y.  
 Baltimore, Md.  
 Arlington, Va.  
 Orange, Va.  
 Alliance, Ohio  
 Christiansburg, Va.  
 Carbondale, Ill.  
 Poland, Ohio  
 Asheville, N. C.  
 Charleston, W. Va.  
 Durham, N. C.  
 Framingham, Mass.  
 Cocoa, Fla.  
 Lorain, Ohio  
 New Holland, Pa.  
 Trenton, N. J.  
 W. Caldwell, N. J.  
 Jacksonville, Fla.  
 Matthews, N. C.  
 Matthews, N. C.  
 Glen Rock, N. J.  
 Old Greenwich, Conn.  
 Baltimore, Md.  
 Kernersville, N. C.  
 Charlotte, N. C.

McConnell, Arthur Weir  
 McKelvie, Milton James  
 Meiton, Nichols Joseph  
 Merritt, Glen Carl  
 Mickle, Andrew  
 Miller, Paul Joseph  
 Mitchell, Monroe Sellers  
 Murph, Daniel Shuford, Jr.  
 Newman, Edmund Henry  
 Newton, Walter Cheek, Jr.  
 Noell, Algernon Stanford, Jr.  
 Oharrio, Rodolfo de  
 Otis, George Leslie  
 Pearson, Eugene D.  
 Phillips, Joe R.  
 Premo, Don Allen  
 Priester, John David  
 Reinhart, Henry P.  
 Ridout, Robert Charles  
 Rowe, Alan L.  
 Rusack, John D.  
 Rymer, Jackson Sanford  
 Scollon, Donald B.  
 Shaw, James H.  
 Shirk, Wesley H., Jr.  
 Smith, Edward Byron  
 Tinsley, Charles Crawford  
 Townsend, Donald H.  
 Treat, Charles William  
 Tronolone, Nicholas John  
 Van Buren, Wesley C.  
 Van Dyck, Robert Laird  
 Verity, David Morley  
 Walker, Emanuel Jaynes  
 Waner, Paul G., Jr.  
 Weber, Wheeler Davis  
 Westmoreland, William Vestal  
 White, Arthur Remington, Jr.  
 White, John Edward  
 White, Raymond Herbert, Jr.  
 Wilmer, William B.  
 Wolmering, Robert John  
 Woodfield, Roland Lawton  
 Wright, Robert Toombs  
 Youmans, Corren P.  
 Yourison, James E.

Birmingham, Ala.  
 Gastonia, N. C.  
 Durham, N. C.  
 Greensboro, N. C.  
 Winston-Salem, N. C.  
 Baltimore, Md.  
 Oreland, Pa.  
 Washington, D. C.  
 Irvington, N. J.  
 Durham, N. C.  
 Durham, N. C.  
 Bellavista, Panama  
 Atlanta, Ga.  
 Durham, N. C.  
 Winston-Salem, N. C.  
 Norfolk, Va.  
 Davenport, Iowa  
 Durham, N. C.  
 Pelham, N. Y.  
 Waterbury, Vt.  
 Catskill, N. Y.  
 Charlotte, N. C.  
 Barnesboro, Pa.  
 Baltimore, Md.  
 Philadelphia, Pa.  
 Haddonfield, N. J.  
 Norfolk, Va.  
 Wynnewood, Pa.  
 Port Huron, Mich.  
 Palisade, N. J.  
 Charlotte, N. C.  
 Petersburg, Va.  
 Ontario, Canada  
 Oriental, N. C.  
 Sarasota, Fla.  
 Cumberland, Md.  
 Goldsboro, N. C.  
 Richmond, Va.  
 Covington, Ky.  
 White Plains, N. Y.  
 Baltimore, Md.  
 Dunkirk, N. Y.  
 Washington, D. C.  
 Lookout Mountain, Tenn.  
 Miami, Fla.  
 Wilkinsburg, Pa.

## *Woman's College*

### FRESHMAN CLASS

Adams, Susan Drake  
 Alford, Ella Langdon  
 Allen, Ann  
 Allen, Betty Jean  
 Atkinson, Bettie Helen  
 Avery, Virginia Johnston  
 Baird, Carolyn  
 Baldwin, Suzanne  
 Barton, Jessica Stark  
 Batchelor, Betty Joye  
 Bean, Margery  
 Beck, Suzanne Joyce  
 Belland, Charlotte Ethel  
 Benson, Mary Thornton  
 Bevan, Joyce Ann  
 Black, Elizabeth Gregg  
 Black, Marilyn Elizabeth  
 Blackard, Louise Cornelia  
 Blades, Barbara Ann  
 Blattner, Doris Ellen  
 Bonnesen, Janet Louise  
 Bonneville, Joanne Lorraine  
 Bowman, Dorothy Willard  
 Bradley, Jean  
 Brown, Ann Baldwin  
 Brown, Beverly Holmes

McKeesport, Pa.  
 Henderson, Texas  
 River Forest, Ill.  
 Macon, Ga.  
 Macon, Ga.  
 Alexandria, Va.  
 Highland Park, Ill.  
 Lynchburg, Va.  
 Memphis, Tenn.  
 Orlando, Fla.  
 Greensboro, N. C.  
 Gahanna, Ohio  
 Miami, Fla.  
 Sanford, N. C.  
 Ocean City, N. J.  
 DeLand, Fla.  
 Baltimore, Md.  
 Bristol, Tenn.  
 Richmond, Va.  
 Mountain Lakes, N. J.  
 West Orange, N. J.  
 Chevy Chase, Md.  
 Easton, Md.  
 Burlington, N. C.  
 Louisville, Ky.  
 Baton Rouge, La.



- Brown, Joyee  
 Brunhoff, Marjorie Jean  
 Bryson, Mary Constance  
 Bullard, Mary Ann  
 Burke, Catherine Regina  
 Burrous, Barbara Anne  
 Burton, Ann Mapes  
 Bush, Virginia Anne  
 Calkins, Dorothy Caynor  
 Calmes, Betty Joan  
 Cathey, Grace Elizabeth  
 Caviness, Vera Dorman  
 Chappell, Betty Ruth  
 Churchill, Patty Lou Collins  
 Clark, Janice  
 Clark, Joyee  
 Clarke, Nancy  
 Claughton, Lillian Suzanne  
 Coe, Elaine Marie  
 Coffee, Mary Elizabeth  
 Collins, Patricia Ryan  
 Conant, Sylvia Lee  
 Copeland, Alice Ann  
 Covington, Anne Paschall  
 Cozart, Rachel Stedman  
 Cresap, Janice Bland  
 Crumbley, Jo Claire  
 Cumming, Jane Collier  
 Curren, Mary Louise  
 Davenport, Dorothy E.  
 Day, Mary Gordon  
 DeLapp, Barbara Rose  
 Demorest, Sallie Jane  
 Derrick, Barbara Ann  
 Dienstl, Sharon Rae  
 Doane, Rosamond Foster  
 Dominik, Joyee Mae  
 Downs, Constance Alden  
 Drake, Janet Marie  
 Drake, Mareia Randolph  
 Dudley, Dottie Ann  
 DuMont, Nancy Randolph  
 Dundas, Rosemary Maud  
 Dussault, Adrienne  
 Dutoit, Audrey Louise  
 Dutton, Ruth Clarke  
 Eades, Abigail  
 Earle, Audrey  
 Eaton, Leslie Alice  
 Edens, Catherine Ward  
 Fisher, Helen Ann  
 Flannery, Mary French  
 Flintom, Frances  
 Fogle, Hazel La Rue  
 Foppert, Helen Bolling  
 Forbus, Martha Caroline  
 Ford, Constance Brigham  
 Fox, Nancy Jo  
 Frank, Claire Louise  
 Glaze, Elizabeth Ann  
 Godard, Mary Grace  
 Goldberg, Alma Norma  
 Goode, Elizabeth Ann  
 Gould, Barbara Lynn  
 Grant, Janet  
 Grant, Sally Jane  
 Gray, Aurelia Elizabeth  
 Gray, Nancy Jean  
 Gresham, Barbara Ann  
 Groves, Patricia Ruth  
 Guillot, Martha Elizabeth  
 Hall, Shirley Jean  
 Haller, Terry Allen  
 Hamilton, Julie Hereford  
 Harlee, Alice Stella  
 Harris, Ann Heath  
 Harris, Barbara Anne  
 Hart, Elizabeth Hicks  
 Hawk, Margaret Anne  
 Hayes, Margaret Beryl  
 Hedrick, Peggy Anne  
 Hillsboro, N. C.  
 Delray Beach, Fla.  
 Durham, N. C.  
 Charlotte, N. C.  
 Asheville, N. C.  
 Genesee, Pa.  
 Detroit, Mich.  
 Charleston, W. Va.  
 Richmond, Va.  
 Mansfield, Ohio  
 Dunn, N. C.  
 Lillington, N. C.  
 Hertford, N. C.  
 Puunene, Maui, Hawaii  
 Durham, N. C.  
 Durham, N. C.  
 Auburndale, Mass.  
 Miami, Fla.  
 Langhorne, Pa.  
 Cranford, N. J.  
 Thomasville, Ga.  
 Durham, N. C.  
 Greensburg, Pa.  
 Sumter, S. C.  
 Fuquay Springs, N. C.  
 Miami Beach, Fla.  
 Charlotte, N. C.  
 Griffin, Ga.  
 Cairo, Egypt  
 Berlin, Germany  
 Huntington, W. Va.  
 Lexington, N. C.  
 Jacksonville, Fla.  
 Washington, D. C.  
 Tuckahoe, N. Y.  
 Plainfield, N. J.  
 Park Ridge, Ill.  
 Lexington, Mass.  
 Newtonville, Mass.  
 Asheboro, N. C.  
 Lenoir, N. C.  
 Garden City, N. Y.  
 Southern Pines, N. C.  
 Arlington, Va.  
 Bronx, N. Y.  
 Sparta, N. C.  
 St. Louis, Mo.  
 Durham, N. C.  
 Bronxville, N. Y.  
 Rowland, N. C.  
 St. Louis, Mo.  
 Coral Gables, Fla.  
 Charlotte, N. C.  
 Walkersville, Md.  
 Philadelphia, Pa.  
 Durham, N. C.  
 Auburndale, Mass.  
 Albemarle, N. C.  
 Mount Airy, N. C.  
 Orlando, Fla.  
 Decatur, Ga.  
 New Orleans, La.  
 Cliffside, N. C.  
 St. Louis, Mo.  
 West Palm Beach, Fla.  
 Dayton, Ohio  
 Winston-Salem, N. C.  
 Thomasville, N. C.  
 Elberton, Ga.  
 West Orange, N. J.  
 Decatur, Ga.  
 Roanoke, Va.  
 Towson, Md.  
 New York, N. Y.  
 Palmetto, Fla.  
 York, S. C.  
 Winston-Salem, N. C.  
 Durham, N. C.  
 Cleveland, Ohio  
 Durham, N. C.  
 Durham, N. C.

Herbert, Barbara Gay  
 Hibbler, Charlotte Virginia  
 Higgins, Deborah R.  
 Hill, Margaret Ruth  
 Holley, Helen Roth  
 Holloway, Margaret Francis  
 Hopkins, Marie de Bruyn Kops  
 Horton, Dottie Boyd  
 Hunt, Constance Forsyth  
 Hunt, Sara Dewey  
 Hurst, Mary Alice  
 Ireland, Barbara Ann  
 Jackson, Shola C.  
 Jacobs, Donnie Lou  
 Jansky, Anne Moreau  
 Jarrell, Penelope Hampton  
 Johnson, Jean Ann  
 Johnson, Rebecca Ann  
 Johnston, Aileen Morel  
 Jones, Marilyn  
 Jones, Nell Perkins  
 Jones, Sue Dolores  
 Kaminsky, Janet Arlene  
 Keith, Carole Marion  
 Kendall, Judith Hayward  
 Kennard, Anne Eloise  
 Kennedy, Margaret Huber  
 Kerbeck, Jane Rachel  
 Ketner, Alice Camille  
 Kimball, Marolyn Coffin  
 Kneece, Alice Vida  
 Knickerbocker, Fay Ann  
 Knights, Margaret  
 Koonce, Lena Vale  
 Kreider, Jean Elizabeth  
 Kyle, Frances Elizabeth  
 Landon, Kathleen Elspeth  
 Lane, Barbara  
 Lane, Nancy Lee  
 Lanigan, Dorothy Elizabeth  
 Larrinoa, Francine Theresa  
 Lawrence, Margaret Patterson  
 Lee, Betsy Page  
 Lee, Mary Leonard  
 Lefebvre, Harriet Marguerite  
 Lennon, Frances Knight  
 Levin, Paula Jane  
 Lovett, Ruth  
 Macdonald, Jane Emery  
 MacLehose, Elizabeth Joan  
 Maness, Sara Nell  
 Marshall, Mildred Maurine  
 Matheson, Elizabeth Lou  
 Matheson, Philys Bryant  
 Matthews, Barbara Dale  
 Maxwell, Nancy Margarete  
 McBride, Frances Elizabeth  
 McCauley, Margaret Ellen  
 McCollum, Gloria Mae  
 McCrary, Nancy Marion  
 McCutcheon, Julia Parrott  
 McDonald, Aune  
 McDowell, Betty Ann  
 McKelvey, Nancy Eleanore  
 McKelvie, Mary Duke  
 Miller, Joanne  
 Miller, Josephine Arthur  
 Miller, Martha Jane  
 Milligan, Patricia Anne  
 Mitchell, Fay Bond  
 Mittleman, Judith Audrey  
 Moeller, Patricia Anne  
 Moffitt, Babs  
 Moore, Carolyn Virginia  
 Murphy, Nancy Lou  
 Murray, Marilyn Cissie  
 Muse, Elizabeth Chadwick  
 Nash, Carol Harmon  
 Neal, Constance Jane  
 Nease, Mabel Ruth  
 Needham, Nancy Eugenia  
 New York, N. Y.  
 Lookout Mountain, Tenn.  
 Jacksonville, Fla.  
 Evansville, Ind.  
 Palm Beach, Fla.  
 Durham, N. C.  
 Charlotte, N. C.  
 Concord, N. C.  
 Elizabeth City, N. C.  
 Goldsboro, N. C.  
 Washington, D. C.  
 Hamptonville, N. C.  
 New Rochelle, N. Y.  
 Durham, N. C.  
 Little Silver, N. J.  
 Rock Hill, S. C.  
 Atlanta, Ga.  
 High Point, N. C.  
 Asheville, N. C.  
 Mobile, Ala.  
 Charlotte, N. C.  
 Gastonia, N. C.  
 Savannah, Ga.  
 Greensboro, N. C.  
 Middletown, Ohio  
 Arlington, Va.  
 Charlotte, N. C.  
 Ridgewood, N. J.  
 Concord, N. C.  
 Boonton, N. J.  
 Chesterfield, S. C.  
 Gainesville, Ga.  
 Golf, Ill.  
 Tarboro, N. C.  
 Ft. Lauderdale, Fla.  
 Long Island, N. Y.  
 Durham, N. C.  
 Georgetown, Del.  
 Bronxville, N. Y.  
 Washington, D. C.  
 Havana, Cuba  
 Elizabeth City, N. C.  
 Durham, N. C.  
 Macon, Ga.  
 S. Charleston, W. Va.  
 Fairmont, N. C.  
 Fishkill, N. Y.  
 Dixon, Ill.  
 Scarsdale, N. Y.  
 Summit, N. J.  
 Greensboro, N. C.  
 Walnut Cove, N. C.  
 Robbinsville, N. J.  
 Hickory, N. C.  
 Durham, N. C.  
 Tampa, Fla.  
 Plainfield, N. J.  
 Durham, N. C.  
 Fairmont, N. C.  
 Bristol, Tenn.  
 Durham, N. C.  
 Raleigh, N. C.  
 Shelton, S. C.  
 Derry, Pa.  
 Kiugs Mountain, N. C.  
 Coral Gables, Fla.  
 Cleveland Heights, Ohio  
 Peoria, Ill.  
 Atlantic City, N. J.  
 Charlotte, N. C.  
 Shaker Heights, Ohio  
 Charlotte, N. C.  
 Los Angeles, Calif.  
 Shelby, N. C.  
 Wilmette, Ill.  
 Newark, Del.  
 Williamston, N. C.  
 Merion Station, Pa.  
 Charlotte, N. C.  
 Charlotte, N. C.  
 Conneaut, Ohio

- Nelson, Mollie Eda  
 Nolen, Ann Turner  
 Norris, Ann Rollins  
 Northington, Nancy Clark  
 O'Brien, Nancy Helen  
 Oehlbeck, Avis Ann  
 O'Gara, Patricia Marie  
 Olin, Alette Louise  
 O'Neil, Nancy Catherine  
 Osborn, Frances Ann  
 Otley, Mary Ella  
 Pachuta, Sylvia Ann  
 Page, Nina Elizabeth  
 Palmer, Phyllis May  
 Parker, Lelia Celeste  
 Parker, Marcia Anne  
 Peale, Georgia Dick  
 Pearce, Sarah Margaret  
 Perkins, Susan Havard  
 Perry, Iris Anne  
 Peter, Patricia Virginia  
 Peterson, Elizabeth Anne  
 Pierce, Rose Marie  
 Pike, Mildred Ann  
 Power, Carrel Ann  
 Procter, Nancy Jane  
 Rains, Maxine Dale  
 Randolph, Hilda Anthony  
 Ravenel, Katherine Parr  
 Redgrave, Catherine Jane  
 Reed, Barbara Ann  
 Reese, Sarah  
 Revels, Norma Jeanne  
 Rigsbee, Ann Monroe  
 Ritch, Julia Ann  
 Roberts, Sue Beryl  
 Robinson, Mary Lee  
 Rodgers, Frances Louise  
 Roseborough, Virginia Lee  
 Rosenthal, Janet Ann  
 Ruffin, Jane Byrd  
 Russell, Barbara Stone  
 Russell, Elma Marie  
 Sale, Grace Wilson  
 Scheller, Marie Anne  
 Schmitt, Evelyn Herrin  
 Schneidewind, Frances Elizabeth  
 Secrest, Dorothy Elizabeth  
 Seyffert, Mary Jane  
 Sharpe, Frankie Lou  
 Shields, Mary Jane  
 Silverman, Marjorie Sue  
 Skinner, Nancy Kathryn  
 Skorvaga, Margaret Ann  
 Slate, Suzanne  
 Slater, Bobbye Jean  
 Sloan, Nancy Ann  
 Smedley, Carol Louise  
 Smith, Catherine Lorah  
 Smith, Elizabeth Anne  
 Smith, Jenell Ann  
 Smith, Mary Blair  
 Smith, Nancy Lee  
 Sommardahl, Patricia Lee  
 Spatola, Helen Suzanne  
 Stanback, Sally Ann  
 Staub, Dorothy Annette  
 Stockton, Nancy Jane  
 Stott, Mary Belle  
 Street, Maryellen  
 Sweeney, Janet Elizabeth  
 Thomas, Emma Lewis  
 Thompson, Rebekah Jane  
 Thomson, Ann Shively  
 Todd, Clara Prudence  
 Towers, Sarah Agnes  
 Townsend, Nancy Priscilla  
 Triska, Margit Olstad  
 Trudeau, Jeanne Tisdale  
 Uretsky, Roberta Lee  
 Vallentyne, Jane  
 Columbus, Ohio  
 Roanoke, Va.  
 Raleigh, N. C.  
 Charlotte, N. C.  
 Hamlet, N. C.  
 Morganton, N. C.  
 Atlanta, Ga.  
 Hartsdale, N. Y.  
 Winston-Salem, N. C.  
 Hayti, Mo.  
 Upper Montclair, N. J.  
 Mount Carmel, Pa.  
 Yanceyville, N. C.  
 Wynnewood, Pa.  
 Asheville, N. C.  
 Arlington, Va.  
 Garden City, N. Y.  
 Greensboro, N. C.  
 Clayton, Mo.  
 Durham, N. C.  
 Orlando, Fla.  
 Penns Grove, N. J.  
 Gastonia, N. C.  
 Raleigh, N. C.  
 Coral Gables, Fla.  
 Raleigh, N. C.  
 Delray Beach, Fla.  
 Jacksonville, Fla.  
 Greensboro, N. C.  
 Atlanta, Ga.  
 Wilmington, Del.  
 Durham, N. C.  
 Cocoa, Fla.  
 Durham, N. C.  
 Charlotte, N. C.  
 Asheville, N. C.  
 Coral Gables, Fla.  
 Clayton, Mo.  
 DeLand, Fla.  
 North Plainfield, N. J.  
 Durham, N. C.  
 Greenville, N. C.  
 Fairmont, N. C.  
 Charleston, W. Va.  
 Greenville, N. C.  
 Larchmont, N. Y.  
 Upper Montclair, N. J.  
 Lillington, N. C.  
 Hampton, Va.  
 Elm City, N. C.  
 Durham, N. C.  
 Brooklyn, N. Y.  
 Zephyrhills, Fla.  
 Charleston, W. Va.  
 High Point, N. C.  
 Atlanta, Ga.  
 Wilmington, N. C.  
 Shaker Heights, Ohio  
 Greenville, N. C.  
 Charleston, W. Va.  
 Jacksonville, Fla.  
 Greensboro, N. C.  
 Washington, N. C.  
 Roanoke, Va.  
 Merion, Pa.  
 Miami, Fla.  
 Westfield, N. J.  
 Salem, Ohio  
 Garland, N. C.  
 Woodbridge, Conn.  
 Gainesville, Fla.  
 Charleston, W. Va.  
 Chester, Va.  
 Baltimore, Md.  
 Fayetteville, N. C.  
 Jacksonville, Fla.  
 Charlottesville, Va.  
 Wassenaar, Holland  
 Kings Park, N. Y.  
 New York, N. Y.  
 Oak Park, Ill.

Vanderhoof, Diane Emilie  
 Vann, Billie Jeanne  
 Van Sickler, Gail Treat  
 Wagoner, Iona Patricia  
 Wallace, Susan  
 Ware, Margaret Virginia  
 Warm, Tallulah Barbara  
 Watkins, Joyce Ann  
 Watkins, Linda Jane  
 Watkins, Margaret Louise  
 Weedon, Betty Joyce  
 Westcott, Carolyn  
 White-Spunner, Joan Irving  
 Whitmore, Mary Ellen  
 Williams, Anne Carlyle  
 Williams, Shirley Ann  
 Willard, Helen Elleda  
 Willoughby, Laura Virginia  
 Wilmer, Florence Page  
 Wilson, Anne Sanders  
 Wilson, Barbara Mallard  
 Wilson, Bette Jane  
 Wilson, Mary Rebekah  
 Wingard, Alice Elizabeth  
 Winkler, Sandra Gil  
 Wise, Constance Anne  
 Woods, Barbara Anne  
 Woodworth, Barbara Ann  
 Worsham, Mary Elizabeth  
 Yancey, Margaret Hunter  
 Zimmerman, Elaine Elizabeth  
 Zwick, Natalie Virginia

Toccoa, Ga.  
 Fayetteville, N. C.  
 Washington, D. C.  
 Elon College, N. C.  
 Wrightsville, Pa.  
 Atlanta, Ga.  
 Mount Vernon, N. Y.  
 Durham, N. C.  
 Farmont, W. Va.  
 Charlotte, N. C.  
 Hollywood, Fla.  
 Dunn, N. C.  
 Pittsburgh, Pa.  
 Salem, Va.  
 Lenoir, N. C.  
 Bethesda, Md.  
 Raleigh, N. C.  
 Jackson, Miss.  
 Chestertown, Md.  
 Monroe, N. C.  
 Rose Hill, N. C.  
 Bradenton, Fla.  
 Durham, N. C.  
 Wilmington, N. C.  
 New York, N. Y.  
 Winter Haven, Fla.  
 Arlington, N. J.  
 Erwin, N. C.  
 Ruffin, N. C.  
 Raleigh, N. C.  
 Grosse Pointe, Mich.  
 Dayton, Ky.

## SOPHOMORE CLASS

Adams, Frances Parker  
 Adams, Lindalyn Bennett  
 Akin, Jane Margaret  
 Aldridge, Cornelia Boardman  
 Alyea, Nancy Anderson  
 Anderson, Katherine McClure  
 Atkinson, Jane Cary  
 Babb, Helen Lee  
 Bacon, Mary Anne  
 Barge, Ann Reeves  
 Barnes, Norma Anne  
 Barrows, Nancy W.  
 Beach, Ruth I.  
 Beal, Mays Caroline  
 Bellersen, Rita Catherine  
 Bishop, Margaret Jean  
 Blanks, Marguerite  
 Blight, Jane Ann  
 Bohn, Mary Lucile  
 Bolich, Anne Harrison  
 Bolmeier, Barbara Joan  
 Boyle, Beverly Kay  
 Boysworth, Jeannine  
 Brigstocke, Joan Dunbar  
 Broadbudd, Claire Tyler  
 Brokenshire, Janet Davis  
 Brooks, Elizabeth Ann  
 Broun, Caroline Gordon  
 Brown, Sally Ann  
 Brown, Sarah May  
 Bruce, Betty Louise  
 Brunkow, Jane Frances  
 Bryan, Jean L.  
 Campbell, Carolyn Sue  
 Canada, Betty May  
 Cannell, Nancy Jean  
 Cantrell, Catherine Jane  
 Carmichael, Marcia Lee  
 Carr, Mitta Gairdner  
 Carter, Katherine Ray  
 Cartwright, Margaret Elizabeth  
 Causey, Ann Elizabeth  
 Clay, Jane Elaine  
 Clements, Peyton  
 Cohan, Mary Patricia  
 Cohoon, Patricia Julia

Washington, D. C.  
 Dallas, Texas  
 La Feria, Texas  
 Wayne, Pa.  
 Durham, N. C.  
 Macon, Ga.  
 Enfield, N. C.  
 Raleigh, N. C.  
 Middletown, Conn.  
 Durham, N. C.  
 Charles Town, W. Va.  
 Cincinnati, Ohio  
 Oneida, N. Y.  
 Gastonia, N. C.  
 Cincinnati, Ohio  
 St. Petersburg, Fla.  
 Jacksonville, Fla.  
 Huntington Woods, Mich.  
 Lenoir, N. C.  
 Durham, N. C.  
 Durham, N. C.  
 Clayton, Mo.  
 Albemarle, N. C.  
 Dover, Pa.  
 Bowling Green, Va.  
 Allentown, Pa.  
 New Rochelle, N. Y.  
 Roanoke Rapids, N. C.  
 Charlotte, N. C.  
 Rutherford, N. J.  
 Palatka, Fla.  
 Pelham Manor, N. Y.  
 Cleveland, Ohio  
 Summersville, W. Va.  
 Summit, N. J.  
 Shaker Heights, Ohio  
 Atlanta, Ga.  
 Gloucester, Va.  
 Oxford, N. C.  
 Maxton, N. C.  
 Ferndale, Mich.  
 Bethesda, Md.  
 Roselle Park, N. J.  
 Durham, N. C.  
 Wooster, Ohio  
 Columbia, N. C.

- Cooke, Betty Sue  
 Cooper, Dora Anne  
 Cooper, Stephanie Hilda  
 Corzett, Joan  
 Couch, Sally Lonise  
 Crew, Arlene  
 Crowell, Joan Lovelace  
 Crutcher, Frances Dinkins  
 Curlee, Geraldine Teresa  
 Currie, Betty London  
 Dabney, Elizabeth Prewitt  
 Davis, Ann  
 Dawson, Mary Howland  
 DePass, Nancy Witherspoon  
 Deyton, Ann Woody  
 Dickert, Elizabeth Ann  
 Dietz, Hattie Louise  
 Divine, Elinor Faxon  
 Dollens, Marjorie Lon  
 Connelly, Romana Kathryn  
 Dowdy, Patricia Ann  
 Downes, Mary Elizabeth  
 Drew, Dora Anne  
 Dunham, Dorothy Elizabeth  
 Edens, Eleanor Jean  
 Efland, Margie Ann  
 Elder, Mary Lonise  
 Eley, Elizabeth Jump  
 Emerson, Charlotte Ann  
 Evans, Barbara Lee  
 Evans, Carol Austin  
 Everitt, Jo Anne  
 Faulkner, Ann Elizabeth  
 Finter, Patty Preston  
 Fisher, Margaret Alice  
 Fisher, Ruth Ann  
 Fowler, Cody  
 Fowlkes, Nancy Anne  
 Galloway, Barbara Jeannette  
 Gatsch, Marie  
 Gilliam, Frances Joan  
 Gilmour, Jane Oakley  
 Glass, Nina Ruth  
 Gleason, Jane Lansing  
 Glover, Frances Marie  
 Goldman, Sally Ann  
 Goldthwaite, Alice Helen  
 Gordon, Davida Dare  
 Gore, Dorcas Anne  
 Gotwals, Kathryn Lee  
 Graham, Alice Virginia  
 Greco, Miriam Adele  
 Groome, Augusta  
 Grover, Joan Louise  
 Gryder, Barbara Jean  
 Gummels, Joan Martha  
 Gunderson, Ann Kathryn  
 Hampe, Carol Thorne  
 Hardison, Mary Adele  
 Hardison, Sallie Elizabeth  
 Harney, Patsey Field  
 Harter, Barbara Alice  
 Heim, Clara Ann  
 Hennessey, Ellen  
 Hilliard, Betty Joyce  
 Hillman, Nancy  
 Hinson, Patsy Travis  
 Hobbs, Nancy McRae  
 Hodges, Beryl Margaret  
 Hoffman, Joyce Ann  
 Holbeck, Anne Miller  
 Holloway, Jo Anne  
 Holton, Mary-Marie  
 Hooker, Lois Grace  
 House, Martha Lillian  
 Howard, Florence Katherine  
 Howard, Peggy Ann  
 Huckabee, Page DuBois  
 Hughes, Ruth Huddley  
 Hull, Judith Eileen  
 Hulse, Irene
- Norfolk, Va.  
 Raleigh, N. C.  
 New Haven, Conn.  
 Arlington, Va.  
 Chapel Hill, N. C.  
 Orlando, Fla.  
 Enka, N. C.  
 Savannah, Ga.  
 Marshville, N. C.  
 Nashville, Tenn.  
 Lexington, Ky.  
 Olean, N. Y.  
 Sanford, N. C.  
 Camden, S. C.  
 Brevard, N. C.  
 Upper Darby, Pa.  
 Covington, Ga.  
 Kingsport, Tenn.  
 Elmhurst, Ill.  
 Durham, N. C.  
 Durham, N. C.  
 Canton, Ohio  
 Webster Groves, Mo.  
 Warren, Pa.  
 Columbia, S. C.  
 Efland, N. C.  
 Albemarle, N. C.  
 Queen Anne, Md.  
 Bethesda, Md.  
 Maplewood, N. J.  
 Jenkintown, Pa.  
 Durham, N. C.  
 Birmingham, Mich.  
 Washington, D. C.  
 Pleasant Ridge, Mich.  
 Wilmington, N. C.  
 Tampa, Fla.  
 Vicksburg, Miss.  
 Savannah, Ga.  
 Toms River, N. J.  
 Oak Ridge, Tenn.  
 Pleasantville, N. Y.  
 Kannapolis, N. C.  
 Eau Gallie, Fla.  
 Orlando, Fla.  
 Burlington, N. C.  
 Indianapolis, Ind.  
 Southport, Conn.  
 Raeford, N. C.  
 Philadelphia, Pa.  
 Enfield, N. C.  
 Philadelphia, Pa.  
 High Point, N. C.  
 Northampton, Mass.  
 Greensboro, N. C.  
 Webster Groves, Mo.  
 East Orange, N. J.  
 Maumee, Ohio  
 Wadesboro, N. C.  
 Williamson, N. C.  
 Richmond, Ky.  
 Washington, D. C.  
 Montoursville, Pa.  
 Weehawken, N. J.  
 Oxford, N. C.  
 Westport, Conn.  
 Charlotte, N. C.  
 Rocky Mount, N. C.  
 Austin, Texas  
 Sunbury, Pa.  
 Clifton, N. J.  
 Smithfield, Va.  
 Lorisburg, N. C.  
 Camp Lejeune, N. C.  
 Atlanta, Ga.  
 Dunn, N. C.  
 Williamsport, Md.  
 Albemarle, N. C.  
 Randleman, N. C.  
 Charlotte, N. C.  
 New York, N. Y.



- Hunter, Emma Lelia  
 Hurst, Nancy May  
 Jackson, Heleu Louise  
 Jacobs, Mary Lou  
 Jahn, Jeryl May  
 Jenkins, Dorothy  
 John, Louise Reese  
 Jolders, Dwayue Sandra  
 Jones, Virginia Ruth  
 Jordan, Margaret Stepheus  
 Kale, Sarah Dean  
 Kaufman, Holiday Clay  
 Keister, Nancy Ann  
 Kennedy, Tessie Colley  
 Kimmel, Ruth Louise  
 Kira, Leona  
 Kirk, Gene Still  
 Kirkman, Shirley Elizabeth  
 Knott, Marsha  
 Koons, Jean Thorburn  
 Kosterlitz, Ruth  
 Lake, Eleanor Betty  
 LaMothe, Joau Claire  
 Lawrence, Leone Elizabeth  
 Lea, Virginia Ramsay  
 Ledford, Ruth Marie  
 Levenson, Bernice  
 Levin, Ann Ruth  
 Lindsay, Barbara Bremer  
 Lipscomb, Nell Imogene  
 Little, Margaret Lillian  
 Longier, Mary Alice  
 Lonon, Frances Kennedy  
 Lucas, Margaret MacMillan  
 Lynch, Jane Ellen  
 Lyou, Mary Lou  
 Maas, Barbara Hill  
 Mackie, Patricia Jean  
 Maitland, Edwina Churchill  
 Malawista, Joan Enid  
 Markee, Shirley June  
 Massie, Mary Ann  
 Matheson, Alice Sutton  
 McCain, Patsy Ray  
 McCarter, Joan Adele  
 McClamroch, Aune Suowden  
 McConnell, Marion Louise  
 McCoy, Betty June  
 McElroy, Elizabeth Ann  
 McGee, Marianna  
 McGill, Lelia Autrey  
 McKelvey, Priscilla Kay  
 McKinney, Jane Fulton  
 McMasters, Ellen  
 Merritt, Marjorie Anne  
 Michael, Doris Hall  
 Milford, Dolores Ann  
 Miller, Nancy June  
 Mobley, Mariann  
 Mood, Florence Fultou  
 Morris, Pattie Blount  
 Murchie, Muriel Elsie  
 Nichols, Helen Stanley  
 Nichols, Nancy Elizabeth  
 Nowell, Jean Marshall  
 O'Brien, Jay  
 Ogle, Carol Ann  
 Olson, Mary Margaret  
 Parham, Patricia Blauche  
 Parker, Suzanne  
 Perry, Pauline Slater  
 Phillips, Elizabeth Lee  
 Platte, Dorothy Ann  
 Popp, Elaine  
 Potamkin, Dana Lisbeth  
 Pringle, Joan  
 Quarterman, Maneta Ann  
 Rae, Ruth Pauline  
 Raney, Patricia  
 Reams, Mary Glenn  
 Reimer, Jane Barbara  
 Fayetteville, N. C.  
 Winchester, Va.  
 Jacksonville, Fla.  
 Middlesboro, Ky.  
 Manhasset, N. Y.  
 Aulander, N. C.  
 Olean, N. Y.  
 Evanston, Ill.  
 Buffalo, N. Y.  
 Buenos Aires, Argentina, S. A.  
 Kannapolis, N. C.  
 Lancaster, Ky.  
 Albany, N. Y.  
 Durham, N. C.  
 Milford, Del.  
 Tampa, Fla.  
 Tupelo, Miss.  
 High Point, N. C.  
 Charlotte, N. C.  
 Newton, N. J.  
 Irvington, N. J.  
 Charlotte, N. C.  
 St. Louis, Mo.  
 Glou Ellyn, Ill.  
 Rocky Mount, N. O.  
 Durham, N. C.  
 Salisbury, N. C.  
 Miami Beach, Fla.  
 Toledo, Ohio  
 Jacksonville Beach, Fla.  
 Sumter, S. C.  
 Saxapahaw, N. C.  
 Kinston, N. C.  
 Burgaw, N. C.  
 Pleasantville, N. Y.  
 Madison, W. Va.  
 Glen Rock, N. J.  
 Hamilton, Ohio  
 Tenaady, N. J.  
 New York, N. Y.  
 Durham, N. C.  
 Waynesville, N. C.  
 Raeford, N. C.  
 Asheboro, N. C.  
 River Forest, Ill.  
 Chapel Hill, N. C.  
 Atlanta, Ga.  
 Alliance, Ohio  
 Houston, Texas  
 Savanuah, Ga.  
 East Orange, N. J.  
 Greensburg, Pa.  
 Winston-Salem, N. C.  
 St. Petersburg, Fla.  
 Easley, S. C.  
 Baltimore, Md.  
 Washington, D. C.  
 Coral Gables, Fla.  
 Reidsville, N. C.  
 Fort George G. Meade, Md.  
 Hertford, N. C.  
 Bridgeport, Conn.  
 Long Branch, N. J.  
 East Cleveland, Ohio  
 Macon, Ga.  
 Northampton, Mass.  
 Washington, D. C.  
 Haines City, Fla.  
 Montreal, Quebec, Canada  
 Youngstown, Ohio  
 Daytona Beach, Fla.  
 Durham, N. C.  
 Montclair, N. J.  
 Lawford, Pa.  
 Miami, Fla.  
 Lake Worth, Fla.  
 Jacksonville, Fla.  
 Scarsdale, N. Y.  
 Cleveland, Ohio  
 Toledo, Ohio  
 DeLand, Fla.

Riegle, Shirley  
 Riggs, Mary Alice  
 Robinson, Mary Ann  
 Ryan, Patricia  
 Sage, June Carol  
 Saunders, Virginia Shea  
 Scaff, Annette Lee  
 Schlatter, Anne E.  
 Schuster, Ann Prescott  
 Schweistris, Lazette Yvonne  
 Seaberg, Barbara Glenn  
 Self, Leah Margaret  
 Seligman, Jan  
 Shapiro, Susan  
 Shepherd, Bernice Clarke  
 Sherertz, Margarita Park  
 Shuford, Anne  
 Siegle, Betty Louise  
 Sims, Betty Kathleen  
 Smith, Bonnie Joyce  
 Smith, Virginia Eleanor  
 Smyers, Martha Jane  
 Spunde, Ingrida  
 Stangeland, Greta Sonia  
 Stevens, Mary Lou  
 Stiles, Susan Gay  
 Stubbins, Billie Joanne  
 Sunderland, Nita Kathleen  
 Sutphen, Suzanne Virginia  
 Sutton, Rachel Marie  
 Swift, Isabella Boyd  
 Thompson, Betsy King  
 Tignor, Nan Kellum  
 Tompkins, Carolyn Voncile  
 Trentman, Elizabeth Denne  
 Trowbridge, Cornelia Hubbard  
 Turner, Florence Delia  
 Urban, Dolores Jean  
 Vail, Nancy Elizabeth  
 VanBilliard, Alicia Pauline  
 Van Natta, Barbara Diane  
 Vaughan, Marilyn Frances  
 Vendig, Laurie Ann  
 Vokoun, Sally Arlene  
 Wace, Pamela Evelyn  
 Waldrop, Lois Zeigler  
 Walker, Mary Hope  
 Watchman, Avis Rand  
 Waterfield, Frances McGill  
 Watkins, Martha Jean  
 Watkins, Martha Letitia  
 Weber, Emily Ann  
 Weeks, Ethel Gwendolyn  
 Weigel, Mary Patricia  
 Wendes, Marian Phyllis  
 Westcott, Marilyn Joyce  
 White, Christina Kathryn  
 Whitley, Nina Carolyn  
 Wike, Catherine Shirley  
 Wilson, Paddy Ann  
 Wilson, Patricia Carroll  
 Winters, Mary Tepel  
 Woolery, Martha Belle  
 Worrell, Margaret Geiger  
 York, Shirley Rose  
 Young, Bettie Ann  
 Zanner, Genevieve Ellen  
 Zapf, Brenda

Daytona Beach, Fla.  
 Memphis, Tenn.  
 Asheville, N. C.  
 Chevy Chase, Md.  
 Plainfield, N. J.  
 High Point, N. C.  
 East Orange, N. J.  
 Washington, D. C.  
 Kirkwood, Mo.  
 Greensboro, N. C.  
 Tenaflly, N. J.  
 Siler City, N. C.  
 York, Pa.  
 Washington, D. C.  
 Norfolk, Va.  
 West Carrollton, Ohio  
 Thomasville, N. C.  
 Springfield, Va.  
 Summit, N. J.  
 Durham, N. C.  
 Columbus, Ohio  
 Pittsburgh, Pa.  
 Waverly Hills, Ky.  
 Brooklyn, N. Y.  
 Bloomfield, N. J.  
 Atlanta, Ga.  
 Mexico City, Mexico  
 Newton, Ill.  
 Trenton, N. J.  
 Wilmington, N. C.  
 Jacksonville, Fla.  
 Durham, N. C.  
 Hampton, Va.  
 Jacksonville, Fla.  
 Raleigh, N. C.  
 Ormond, Fla.  
 Winston-Salem, N. C.  
 Ashland, Ky.  
 Sarasota, Fla.  
 Bethlehem, Pa.  
 Atlanta, Ga.  
 Needham, Mass.  
 Sarasota, Fla.  
 Lakewood, Ohio  
 Tampa, Fla.  
 Greenville, N. C.  
 Atlanta, Ga.  
 West Englewood, N. J.  
 Fort Wayne, Ind.  
 Grosse Pointe Farms, Mich.  
 Louisville, Ky.  
 Clayton, Mo.  
 Charlotte, N. C.  
 Cleveland, Ohio  
 Teaneck, N. J.  
 Tenaflly, N. J.  
 Morganton, N. C.  
 Aurora, N. C.  
 New Bern, N. C.  
 Washington, N. C.  
 Winter Park, Fla.  
 Williamsport, Pa.  
 Raleigh, N. C.  
 Palm Beach, Fla.  
 Germantown, Tenn.  
 Durham, N. C.  
 Washington, D. C.  
 East Aurora, N. Y.

## JUNIOR CLASS

Allen, Charlotte Marguerite  
 Anderson, Nancy Inez  
 Andrews, Jane Raine  
 Arrants, Betty Ross  
 Arthur, Marjorie Speer  
 Ballard, Catherine Anne  
 Barber, Betty Jean  
 Barker, Pansy Marie  
 Barnhardt, Anne Louise  
 Bartlett, Elizabeth Ann

Atlanta, Ga.  
 Elmhurst, Ill.  
 Graham, N. C.  
 Athens, Tenn.  
 Bridgeton, N. J.  
 Owings Mills, Md.  
 Columbia, S. C.  
 Durham, N. C.  
 Durham, N. C.  
 Rockford, Ill.

Beachley, Jo Ann  
 Berner, Carline  
 Bixby, Mary Louise  
 Bohlin, Carol  
 Bollman, Margaret Lois  
 Bolmeier, Hazel Jane  
 Bowen, Phoebe-May  
 Bowers, Marjorie Naomi  
 Bowers, Mary Blair  
 Brantley, June Caroline  
 Brennenman, Beverly Ann  
 Brent, Catherine Hart  
 Brittain, Catherine  
 Broome, Wilma Frances  
 Brown, Marion Louise  
 Brown, Norma Marie  
 Bryant, Helen Cantrell  
 Bryson, Elizabeth Dixon  
 Burch, Caroline Sue  
 Burcham, Jean Arthur  
 Cannon, Jo Anne  
 Carr, Emily Catherine  
 Carter, Patricia Jean  
 Cassel, Nancy Anne  
 Castle, Constance Helene  
 Cherry, Julia Pamela  
 Chester, Carolyn Elizabeth  
 Christian, Mary Ann  
 Clark, Ruth Duvall  
 Cline, Barbara Anne  
 Cobb, Fay Ann  
 Coleman, Mary Elizabeth  
 Colledge, Lois June  
 Collinson, Ruth Eleanor  
 Constantine, Margaret Louise  
 Cool, Jeanette Adams  
 Courtney, Virginia Ann  
 Crews, Ann  
 Crow, Barbara Anne  
 Cunningham, Betty Ruth  
 Dameron, Peggy Lee  
 Davidson, Barbara Lynette  
 Davis, Alda Jean  
 Davis, Katharine Anne  
 Davis, Margaret Jane  
 Depp, Beatrice Louise  
 Dixon, Alta Juanita  
 Dodge, Jacqueline Rankin  
 Dodson, Phyllis Patricia  
 Duncan, Laura May  
 Early, Mary Laws  
 Eklund, Helen Mae  
 Evans, Faye Dean  
 Faber, Sandra Suzanne  
 Fairley, Nancy Elizabeth  
 Farnham, Marjorie Arlene  
 Fisher, Dorothy Louise  
 Flanders, Mary Adelaide  
 Francis, Patricia Ann  
 Gaskin, Lillian Rebecca  
 George, Barbara Lou  
 Gerber, Sara Kathryn  
 Glenn, Margaret Ann  
 Goode, Jane Ann  
 Gray, Nina E.  
 Green, Joan S.  
 Guigou, Phyllis Lillian  
 Gullledge, Jane Bailey  
 Haggard, Alice Ann  
 Haim, Simmel Feinberg  
 Hall, Barbara Eloise  
 Hammond, Ann Phifer  
 Hance, Martha Wilmoth  
 Hanna, Ann Jacqueline  
 Harmon, Lelia Ann  
 Harris, Mary E.  
 Harris, Nancy Jean  
 Harris, Virginia Lee  
 Harscheid, Nancy Fuller  
 Hartung, Holly Williams  
 Hauser, Frances Marguierette

Hagerstown, Md.  
 Clewiston, Fla.  
 Detroit, Mich.  
 Needham, Mass.  
 Adamstown, Pa.  
 Durham, N. C.  
 Daytona Beach, Fla.  
 Morganton, N. C.  
 Jackson, N. C.  
 Salisbury, N. C.  
 McKeesport, Pa.  
 Washington, D. C.  
 Tallahassee, Fla.  
 White Plains, N. C.  
 Niagara Falls, N. Y.  
 Scranton, Pa.  
 Winston-Salem, N. C.  
 Bryson City, N. C.  
 Arlington, Va.  
 Durham, N. C.  
 Ft. Bragg, N. C.  
 Richmond, Ky.  
 Gulfport, Miss.  
 Fair Lawn, N. J.  
 Hillsdale, Mich.  
 Durham, N. C.  
 Southern Pines, N. C.  
 Durham, N. C.  
 Tarboro, N. C.  
 Norfolk, Va.  
 Park Ridge, Ill.  
 Hickory, N. C.  
 Winston-Salem, N. C.  
 Connellsville, Pa.  
 Racine, Wis.  
 Shaker Heights, Ohio  
 Lenoir, N. C.  
 Winston-Salem, N. C.  
 Asheville, N. C.  
 Winston-Salem, N. C.  
 Burlington, N. C.  
 Columbus, Ga.  
 Kings Mountain, N. C.  
 Orange, N. J.  
 Leaksville, N. C.  
 Winston-Salem, N. C.  
 Elm City, N. C.  
 Macon, Ga.  
 Washington, D. C.  
 Decatur, Ga.  
 Jacksonville, Fla.  
 Winona, Minn.  
 Lexington, N. C.  
 Ft. Lauderdale, Fla.  
 Raleigh, N. C.  
 New Haven, Conn.  
 Columbia City, Ind.  
 North Weare, N. H.  
 Roanoke, Va.  
 Albemarle, N. C.  
 High Point, N. C.  
 Arlington, Va.  
 Anniston, Ala.  
 Lincoln, N. C.  
 Robersonville, N. C.  
 Coral Gables, Fla.  
 Valdese, N. C.  
 Albemarle, N. C.  
 East Point, Ga.  
 Durham, N. C.  
 Wollaston, Mass.  
 Charlotte, N. C.  
 Durham, N. C.  
 Norfolk, Va.  
 Sarasota, Fla.  
 Winston-Salem, N. C.  
 Toledo, Ohio  
 Summit, N. J.  
 Philadelphia, Pa.  
 Newport, R. I.  
 Durham, N. C.

- Hedrick, Betty Jo  
 Heinke, Betty J.  
 Hollingsworth, Marianne  
 Hough, Hester Van Metre  
 House, Anne Elizabeth  
 Hutchens, Joan  
 Ingwersen, Joan  
 Jacobs, Elinor Louise  
 John, Kay Eleanor  
 Johnson, Mary Shelagh  
 Jones, Barbara Louise  
 Kelly, Sally Perry  
 Kinney, Virginia Marie  
 Kohl, Margaret Valerie  
 Lassiter, Elizabeth Estelle  
 Laubenheimer, Carol Jean  
 Lauer, Edith Anne  
 Law, Rosamund H.  
 Leffler, May Martin  
 Le Stourgeon, Ann Elizabeth  
 Lewis, Jacquelin Ann  
 Lindsay, Jane Beuham  
 Lobell, Marcia Joan  
 Long, Sara Dalton  
 Lord, Elizabeth Eugenia  
 Lundberg, Ann Elizabeth  
 Lyon, Joyce Elaine  
 Mader, Joan Maxine  
 Magee, Laurin Weeks  
 Marsh, Mary Margaret  
 May, Louise Simpson  
 McAfee, Joyce Montgomery  
 McBride, Elsa Tice  
 McGee, Juanita Blaine  
 McKee, Janet Faye  
 McKerley, Rita Adele  
 McMullen, Sue Carroll  
 McRae, Martha Kate  
 Miles, Jane Cynthia  
 Millis, Jill Rae  
 Mills, Carol Reading  
 Milton, Bettye L.  
 Morey, Prudence  
 Moser, M. Beverly  
 Moser, Rebecca Boone  
 Mountford, Jeanne Lucille  
 Murray, Barbara Muriel  
 Murray, Mary Jane  
 Myatt, Ruth Arlene  
 Nagel, Joanne Martha  
 Noble, Barbara Ann  
 Nordwall, Sigrid Ann  
 Oliver, Joan Howard  
 Owens, Janice Clibourne  
 Paetzell, Dorris Marie  
 Pappas, Nancy Lee  
 Parker, Grace Mildred  
 Peeler, Nancy Whitener  
 Pepper, Patricia  
 Perks, Lorna Lou  
 Petersen, Emily Jane  
 Pettit, Marjorie Ann  
 Pickens, M. Susan  
 Pinnix, Joan Henry  
 Plumb, Anne Elizabeth  
 Poole, Evelyn Connelly  
 Powell, Grace Marie  
 Price, Ann Ximena  
 Purviance, Patricia Corrine  
 Quarck, Ursula Carola  
 Randolph, Elizabeth Ann  
 Reid, Celia Minton  
 Reinhart, Janet Burnside  
 Reinsch, Ute Agnes Gisela  
 Rezzonico, L. Kay  
 Richards, Kathryn Joan  
 Richardson, Margaret Catherine  
 Ridener, Vivien Anne  
 Roberts, Joanne  
 Roberts, Patricia Catherine  
 Rooker, Mary Alice  
 High Point, N. C.  
 Miami, Fla.  
 Norfolk, Va.  
 Fort Myers, Fla.  
 Bethel, N. C.  
 Fort Worth, Texas  
 Middletown, Ohio  
 Longmeadow, Mass.  
 Grand Island, Neb.  
 Bogota, Colombia, S. A.  
 Catonsville, Md.  
 Wilmington, N. C.  
 Pittsburgh, Pa.  
 Easton, Pa.  
 Winston-Salem, N. C.  
 Huntington, N. Y.  
 Evansville, Ind.  
 Charleston, W. Va.  
 Miami, Fla.  
 Charlotte, N. C.  
 East Orange, N. J.  
 Toledo, Ohio  
 Fayetteville, N. C.  
 Winston-Salem, N. C.  
 Jacksonville, Fla.  
 Birmingham, Mich.  
 St. Augustine, Fla.  
 Miami, Fla.  
 Ridgewood, N. J.  
 Swarthmore, Pa.  
 Burlington, N. C.  
 Macon, Ga.  
 Durham, N. C.  
 Mt. Airy, N. C.  
 Kirkwood, Mo.  
 Winston-Salem, N. C.  
 Detroit, Mich.  
 Montgomery, Ala.  
 Durham, N. C.  
 Washington, D. C.  
 East Orange, N. J.  
 Waycross, Ga.  
 Lexington, Mass.  
 Baltimore, Md.  
 Gastonia, N. C.  
 Trenton, N. J.  
 Ridgewood, N. J.  
 Tampa, Fla.  
 Durham, N. C.  
 Brooklyn, N. Y.  
 Wynnewood, Pa.  
 Larchmont, N. Y.  
 Wellesley, Mass.  
 Arlington, Va.  
 Milford, N. J.  
 Fredericksburg, Va.  
 Madison, N. J.  
 Salisbury, N. C.  
 Parris Island, S. C.  
 Rockford, Ill.  
 Houston, Texas  
 Washington, D. C.  
 Raleigh, N. C.  
 Gastonia, N. C.  
 Savannah, Ga.  
 Bailey, N. C.  
 Augusta, Ga.  
 Lambertville, N. J.  
 Akron, Ohio  
 Port Washington, N. Y.  
 Toledo, Ohio  
 St. Augustine, Fla.  
 Larchmont, N. Y.  
 Berlin, Germany  
 Charleston, W. Va.  
 Merion, Pa.  
 Durham, N. C.  
 Williamsburg, Ky.  
 Kenmore, N. Y.  
 Scarsdale, N. Y.  
 Warrenton, N. C.

Rose, Patricia Ann  
 Ronton, Betty  
 Ruark, Helen Louise  
 Runyan, Nancy Louise  
 Ruos, Nancy Lee  
 Russell, Elizabeth Craig  
 Russell, Peggy Ann  
 Sattelle, Mary Lon  
 Schulz, Irene Marie  
 Shaw, Sarah Priscilla  
 Smiseth, Alberta M.  
 Smith, Frances Sue  
 Smith, Nancy Farrell  
 Smith, Shirley Mason  
 Snyder, Barbara  
 Speas, Margaret Alsbaugh  
 Spikes, Camilla Watts  
 Spring, Katherine Ann  
 Steele, Bobbye Carolyn  
 Stevens, Thelma Chloe  
 Stokes, Marilyn Veruiez  
 Stone, May Sloan  
 Suttou, Sara Jean  
 Tatum, Aune Low  
 Taylor, Elinore Dannenberg  
 Taylor, Iola Hardy  
 Taylor, Thelma Ann  
 Thompson, Alice Jean  
 Tiller, Lucy Carroll  
 Tracy, Marian Eleanor  
 Tuttle, DeLossie Dean  
 Tuttle, Nancy Sarah  
 Vance, Evaline Irene  
 Wahl, Marjorie Ann  
 Walter, Amy Buesing  
 Waltz, Jane Carol  
 Watkins, Nancy Thomas  
 Webb, Patricia Ann  
 Weedon, Josephine Davis  
 Weidenhan, Marion Clare  
 West, Emily  
 Whitaker, Patricia Ann  
 Wichman, Ann Elise  
 Wiggins, Anna Baker  
 Williams, Naucy Carolyn  
 Wills, Ruth Vines  
 Wilson, Jennet Mae  
 Woollen, Rebecca Meginley  
 Wooten, Patsy Jones  
 Wright, Mary Elizabeth  
 Youmans, Alice Jean  
 Young, Isabelle Mary  
 Ziegler, Joan Sundelius  
 Zipplies, Claire

Allentown, Pa.  
 Miami, Fla.  
 Silver Spring, Md.  
 Washington, D. C.  
 Bridgeville, Del.  
 Upper Montclair, N. J.  
 High Point, N. C.  
 Lorain, Ohio  
 Winter Park, Fla.  
 High Point, N. C.  
 St. Petersburg, Fla.  
 Verona, N. J.  
 Louisville, Ky.  
 Albemarle, N. C.  
 Roslyn, N. Y.  
 Asheville, N. C.  
 Burlington, N. C.  
 Decatur, Ga.  
 Kannapolis, N. C.  
 Jacksonville, Fla.  
 Canton, N. Y.  
 Raleigh, N. C.  
 Cullowhee, N. C.  
 Salisbury, N. C.  
 Huntington, W. Va.  
 New Bern, N. C.  
 Maitland, W. Va.  
 Detroit, Mich.  
 Brunswick, Ga.  
 Osprey, Fla.  
 Greensburg, Pa.  
 Durham, N. C.  
 Coral Gables, Fla.  
 Thomasville, Ga.  
 Durham, N. C.  
 West Orange, N. J.  
 Oxford, N. C.  
 Beaufort, N. C.  
 Jamestown, N. Y.  
 Baltimore, Md.  
 Ft. Lauderdale, Fla.  
 Silver Spring, Md.  
 Fort Wayne, Ind.  
 Hartsdale, N. Y.  
 Belleville, Ill.  
 Erwin, Tenn.  
 West Reading, Pa.  
 Baltimore, Md.  
 Hookerton, N. C.  
 Dnrham, N. C.  
 Miami, Fla.  
 Marietta, Pa.  
 Philadelphia, Pa.  
 Savannah, Ga.

## SENIOR CLASS

Albert, Betty Lu  
 Anderson, Catherine Baxter  
 Arendell, Julia Anne  
 Arnold, Mary Louise  
 Arrington, Elizabeth Ella  
 Austin, Carol Lynn  
 Auter, June Madeleine  
 Awtre, Margaret Anne  
 Bailey, Mary Catherine  
 Bailey, Phoebe Crane  
 Baldwin, Sarah Karnes  
 Ballentine, Margaret Ann  
 Ballentine, Sara Janis  
 Barringer, Norma Page  
 Baxter, Doris Jane  
 Beck, Caroline Adelaide  
 Bell, Elizabeth Dunn  
 Bell, Leslie Cast  
 Best, Charlotte Marion  
 Bieber, Elsie Ruth  
 Bilogan, Rose Mary  
 Blackwell, Lucy M.  
 Blakley, Jane Elizabeth  
 Bolz, Mary Louise

Philadelphia, Pa.  
 Wilson, N. C.  
 Raleigh, N. C.  
 Quincy, Fla.  
 Tavares, Fla.  
 Chattanooga, Tenn.  
 New York, N. Y.  
 Atlanta, Ga.  
 Troy, N. Y.  
 Winchendon, Mass.  
 Durham, N. C.  
 Anderson, S. C.  
 Anderson, S. C.  
 Durham, N. C.  
 Fort Leavenworth, Kan.  
 Toledo, Ohio  
 Concord, Mass.  
 Scarsdale, N. Y.  
 Quincy, Ill.  
 Fleetwood, Pa.  
 East Orange, N. J.  
 Gneiss, N. C.  
 Alliance, Ohio  
 Shaker Heights, Ohio



- Boone, Emily Milton  
 Boone, Rachael Suzanne  
 Borden, Ethel  
 Borden, Nancy Belle  
 Bouton, Freda Lorraine  
 Boyd, Ann Custis  
 Boyer, Barbara Jean  
 Boyle, Lillian Gray  
 Boynton, Elizabeth Hickman  
 Bradley, Mary Jeanne  
 Branch, Mary Alice  
 Bridgers, Anne Anderson  
 Brock, Dorothy Anne  
 Bronson, Anne Leake  
 Browning, Virginia Crawford  
 Buchanan, Anne  
 Butler, Erma Maude  
 Butz, Mary Sarah  
 Byrne, Sally  
 Camm, Gertrude Elizabeth  
 Casselberry, Ruth Ann  
 Chapman, Marion Francis  
 Chappell, Grace Elizabeth  
 Cleaveland, Carol Loraine  
 Clements, Mary Ann  
 Coble, Barbara Lou  
 Coggin, Sarah Jane  
 Collier, Anne  
 Conoly, Suzanne  
 Corpening, Barbara Iris  
 Couble, Judith Patricia  
 Craig, Joan  
 Crowell, Doris Lee  
 Dackis, Kalliope Irene  
 Demarest, Nancy Ramey  
 Derby, Jean Leslie  
 Dickens, Mary Fleming  
 Dixon, Dorothy Lee  
 Ely, Elizabeth Cury  
 Ennis, Kathleen  
 Everitt, May Bess  
 Fahringer, Ruth Alvern  
 Falin, Joann  
 Feaster, Norma Dana  
 Featherstone, Sara Jane  
 Flanders, Jane Anne  
 French, Ellen Fleming  
 Fritz, Martha Anne  
 Frost, Elizabeth Whitney  
 Garnett, Ellen Marshall  
 Gebert, Joan Phyllis  
 Geitner, Alice Nixon  
 Golden, Dorothy Lita  
 Goldstone, Roslyn B.  
 Goodman, Marilyn Bertha  
 Gore, Alice Richards  
 Gosnell, Carolyn Forte  
 Grainger, Lillian Elizabeth  
 Groves, Miriam Elizabeth  
 Gwyn, Patricia Wright  
 Haldeman, Lillian Virginia  
 Hall, Jane Madeline  
 Hanser, Jana Lucille  
 Harmeling Jane  
 Harrison, Priscilla Ann  
 Harvard, Dorothy Spicer  
 Hauser, Betty Lucille  
 Hay, Virginia Anne  
 Heard, Diana H.  
 Hefflin, Patsy Gordon  
 Henchie, Janet Hamilton  
 Herndon, Joyce Camille  
 Herr, Billye Barr  
 Hight, Jeanne  
 Hodgson, Nancy Lombard  
 Hogue, Ann Carol  
 Hooks, Mary Milburn  
 Houck, Margaret Ann  
 House, Mary Elizabeth  
 Hunt, Nancy Maxine  
 Hurst, Elizabeth June  
 Memphis, Tenn.  
 Penn's Grove, N. J.  
 Concord, Mass.  
 Philadelphia, Pa.  
 Madison, N. J.  
 Newport News, Va.  
 Washington, D. C.  
 Sanford, Fla.  
 Durham, N. C.  
 Kirkwood, Mo.  
 Schenectady, N. Y.  
 Wilson, N. C.  
 Tuckahoe, N. Y.  
 Greenwich, Conn.  
 Durham, N. C.  
 Durham, N. C.  
 Addison, N. Y.  
 Jacksonville, Fla.  
 Louisville, Ky.  
 Fairborn, Ohio  
 Phoenixville, Pa.  
 Burlington, N. C.  
 Atlanta, Ga.  
 Morristown, N. J.  
 Durham, N. C.  
 Toledo, Ohio  
 Cary, N. C.  
 Ormond Beach, Fla.  
 Jacksonville, Fla.  
 Granite Falls, N. C.  
 Arlington, Va.  
 Camp Hill, Pa.  
 Lincolnton, N. C.  
 Durham, N. C.  
 Plainfield, N. J.  
 Rockland, Mass.  
 Bethesda, Md.  
 Wilmington, N. C.  
 Narrows, Va.  
 Washington, D. C.  
 Durham, N. C.  
 Clarksville, Va.  
 Kingsport, Tenn.  
 Miami, Fla.  
 Durham, N. C.  
 Newark, N. J.  
 Woodstock, Va.  
 Walkertown, N. C.  
 Catskill, N. Y.  
 Birmingham, Ala.  
 Union, N. J.  
 Hickory, N. C.  
 Miami, Fla.  
 Bronx, N. Y.  
 Wilmington, N. C.  
 Fanwood, N. J.  
 Charlotte, N. C.  
 Bala-Cynwyd, Pa.  
 Gastonia, N. C.  
 Durham, N. C.  
 Tampa, Fla.  
 Tampa, Fla.  
 St. Louis, Mo.  
 St. Petersburg, Fla.  
 Houston, Texas  
 Durham, N. C.  
 Durham, N. C.  
 Miami, Fla.  
 Gulfport, Miss.  
 Durham, N. C.  
 Park Ridge, Ill.  
 Durham, N. C.  
 West Palm Beach, Fla.  
 Pine Bluff, Ark.  
 Summit, N. J.  
 Atlanta, Ga.  
 Covington, Va.  
 Roanoke, Va.  
 Atlanta, Ga.  
 Lexington, N. C.  
 Winchester, Va.

Imler, Ruthann  
 Johnson, Virginia Mae  
 Jones, Jo Anu  
 Kane, Harriet Dickey  
 Keuyon, Elizabeth Peuteccost  
 Kinuikiu, Janice Jeannette  
 Kiser, Bobbie Jo  
 Knight, Virginia Frances  
 Knott, Sarah Ann  
 Larkin, Jeanne Outlaw  
 Lee, Diane Bayler  
 Leeper, Doris Marie  
 Lenning, Dorothy Ann  
 Levering, Mildred Carolyn  
 Lindsey, Love Loureen  
 Linthicum, L. Joyce  
 Lockhart, Mary Jane  
 Long, Myrtle Elaine  
 Lunger, Marian L.  
 Lydon, Elizabeth Aune  
 Markwell, Patricia Ruth  
 Martin, Norma Louise  
 May, Barbara Watkins  
 McAlister, Patricia M.  
 McBride, Jacqueline Faye  
 McClure, Marie Price  
 McCormic, Joyce  
 McDonald, Mary Alice  
 McElrath, Mary Jane  
 McLawhorn, Madge Gay  
 McMullan, Anne Skinner  
 McMullan, Mary Freeland  
 McNamee, Julia Patricia  
 Meudenhall, Olivia Anne  
 Mitchell, Mary Jones  
 Montgomery, Shasta Novelline  
 Morrell, Monna Lea  
 Morse, Carolyn Beeson  
 Moseley, Katharine Templeton  
 Moyer, Jean Arlene  
 Mund, Margaret Eileen  
 Murdoch, Evelyn Janet Barbara  
 Nance, Ruth Myers  
 Newman, Jeanine  
 Olds, Marjorie Louise  
 Olive, Patsy Branch  
 Ontrich, Beryle Leslie  
 Paddock, Nancy Ellen  
 Palmer, Ainslie Louise  
 Park, Eileen Ora  
 Patton, Mildred  
 Pentz, Joyce  
 Perkins, Donna Jean  
 Platte, Wende Jane  
 Plummer, Beatrice Choate  
 Praeger, Elinor  
 Prestwich, Jane  
 Procter, Elizabeth Marriott  
 Pugh, Winifred Jean  
 Quillian, Harriet Sandeford  
 Reid, Jean Allan  
 Roesch, Sibylle Diane  
 Rosenblum, Judith Louise  
 Ross, Jean Shirley  
 Sanders, Mary Alice  
 Saul, Nancy Louise  
 Schermerhorn, Jennette Ives  
 Schueider, Joan Kathryn  
 Schreiner, Ruth Irene  
 Schrider, Jane Louise  
 Schuler, Florence Ines  
 Sheffield, Fay Hammond  
 Sherman, Virginia Anne  
 Sherrill, Nancy Newburn  
 Shore, Lelia Laura  
 Sizemore, Farish Banks  
 Slocum, Joanne  
 Smith, Issabella Peggy  
 Smith, Lena McArthur  
 Smith, Rebekah Ann  
 Sowers, Ella Frances

Tulsa, Okla.  
 McKeesport, Pa.  
 Marion, Ind.  
 Kingsport, Tenn.  
 Gainesville, Ga.  
 Arlington, Va.  
 Albemarle, N. C.  
 Bridgeport, Conn.  
 Burlington, N. C.  
 Asheville, N. C.  
 Winston-Salem, N. C.  
 Charlotte, N. C.  
 Dayton, Ohio  
 Haddonfield, N. J.  
 Ocala, Fla.  
 High Point, N. C.  
 Durham, N. C.  
 Hurdle Mills, N. C.  
 New York, N. Y.  
 Cranford, N. J.  
 Louisville, Ky.  
 Union, N. J.  
 Burlington, N. C.  
 Washington, Pa.  
 Rural Hall, N. C.  
 Valley Stream, N. Y.  
 Rowland, N. C.  
 Durham, N. C.  
 Sandersville, Ga.  
 Winterville, N. C.  
 Edenton, N. C.  
 High Point, N. C.  
 Jacksonville, Fla.  
 Orlando, Fla.  
 La Grange, N. C.  
 Washington, D. C.  
 Roxboro, N. C.  
 Swarthmore, Pa.  
 Kinston, N. C.  
 Oteen, N. C.  
 Washington, D. C.  
 Butler, N. C.  
 Charlotte, N. C.  
 Charlotte, N. C.  
 Grand Rapids, Mich.  
 Durham, N. C.  
 Washington, D. C.  
 St. Louis, Mo.  
 Spokane, Wash.  
 Johnstown, Pa.  
 Durham, N. C.  
 DuBois, Pa.  
 Winston-Salem, N. C.  
 Montclair, N. J.  
 Atlanta, Ga.  
 Washington, D. C.  
 Sarasota, Fla.  
 Raleigh, N. C.  
 Greensboro, N. C.  
 Coral Gables, Fla.  
 Charleston, W. Va.  
 Bronxville, N. Y.  
 New York, N. Y.  
 Sanford, Maine  
 Houston, Texas  
 Charleston, S. C.  
 Providence, R. I.  
 Washington, D. C.  
 Prairie Du Chien, Wis.  
 Toledo, Ohio  
 Bogota, Colombia, S. A.  
 Atlanta, Ga.  
 Ft. Lauderdale, Fla.  
 Sarasota, Fla.  
 Charlotte, N. C.  
 High Point, N. C.  
 Birmingham, Ala.  
 Birmingham, Ala.  
 Clover, S. C.  
 Lexington, N. C.  
 Concord, N. C.

Standard, Marian Elaine  
 Stebbins, Helen Yvonne  
 Steumetz, Dorothy M.  
 Stormont, Mary Lytle  
 Strickland, Elizabeth Wells  
 Stroud, Mary Jo  
 Sullivan, Emily Coy  
 Swiger, Julia May  
 Tate, Joan Foster  
 Thomas, Mary MacKenzie  
 Thompson, Ramoua Dolores  
 Tillett, Anne Parker  
 Trimmer, Mary Elizabeth  
 Tully, Ardenia Miffleton  
 Unangst, Joanne  
 Van Dobbenburgh, Ida A. M.  
 Voegelin, Joan  
 Waggouer, Georgianne  
 Wagner, Claude Marie  
 Walker, Patricia Anne  
 Walton, Eleanore Corsina  
 Ward, Frances Annette  
 Waybright, Mary Elizabeth  
 Webb, Mary Eleanor  
 Weir, Jean Shirley  
 Whitaker, Mary McCall  
 White, Barbara Green  
 White, Phyllis  
 Whittle, Mary, Eliza  
 Wienecke, Marian Louise  
 Wilkins, Mary Alice  
 Wilson, Carol Jean  
 Wood, Louise Elder  
 Woodall, Ann Wescott  
 Woodward, Consuelo L.  
 Woodward, Dorothy  
 Woodward, Sara Elizabeth  
 Yarin, Elaine Ruth

Bronx, N. Y.  
 Darien, Ga.  
 Brookline, Mass.  
 Evanston, Ill.  
 Atlanta, Ga.  
 Jacksonville, Fla.  
 Anderson, S. C.  
 Clarksburg, W. Va.  
 Washington, D. C.  
 Burlington, Fla.  
 Jacksonville, Fla.  
 Durham, N. C.  
 Rutledge, Pa.  
 Petersburg, Va.  
 Nazareth, Pa.  
 Enka, N. C.  
 Chicago, Ill.  
 Ravenna, Ohio  
 New York, N. Y.  
 Margate, N. J.  
 Durham, N. C.  
 Elizabeth City, N. C.  
 Charleston, W. Va.  
 Miami Beach, Fla.  
 Media, Pa.  
 Durham, N. C.  
 St. Augustine, Fla.  
 Palmerton, Pa.  
 Brunswick, Ga.  
 East Orange, N. J.  
 Sanford, N. C.  
 Erie, Pa.  
 Bradenton, Fla.  
 Warrenton, N. C.  
 Parkersburg, W. Va.  
 Raleigh, N. C.  
 Columbus, Ga.  
 Brooklyn, N. Y.

## SPECIAL STUDENTS

Adams, Ruth  
 Alderman, Rebecca Lorena  
 Allen, Jessie Ellis  
 Anderson, Carol Snow  
 Anderson, Marjorie Goff  
 Barnhart, Betty  
 Bell, Josephine Anderson  
 Bell, Myrna Perry  
 Bennett, Grace Reed  
 Bercovitz, Mary C.  
 Bitting, Mary Elizabeth  
 Black, Ann B.  
 Boone, Edith Gray  
 Botwin, Ethel Shosterman (Mrs.)  
 Boulton, Betty Ann (Mrs.)  
 Boyd, Patricia  
 Bray, Dorothy  
 Burroughs, Betsy B.  
 Byatt, Patricia Catherine  
 Cameron, Sybil  
 Campbell, Louey  
 Cansler, Dorothy Phillips (Mrs.)  
 Carpenter, Evelyn M.  
 Cato, Alma Sox  
 Cekada, Althea  
 Clegg, Elizabeth Douglas  
 Conley, Billie Marie  
 Cough, Willie Brittan  
 Cress, Vivian Elizabeth  
 Crigger, Pauline  
 Crum, Pat  
 Daniels, Carolyn  
 Dortch, Joyce Whitfield  
 Duque, Maria  
 Duque, Mercedes  
 Easom, Martha  
 Egan, Louise Caroline  
 Elliott, Eula Joyce  
 Ewing, Mary Jewell

Truman, Minn.  
 Norfolk, Va.  
 Salisbury, Md.  
 Princeton, W. Va.  
 Durham, N. C.  
 Roanoke, Va.  
 Durham, N. C.  
 Durham, N. C.  
 Milford, Del.  
 Durham, N. C.  
 Durham, N. C.  
 Durham, N. C.  
 Nashville, N. C.  
 Durham, N. C.  
 Durham, N. C.  
 Montreal, Quebec, Canada  
 Elizabeth City, N. C.  
 Durham, N. C.  
 Union, N. J.  
 Durham, N. C.  
 Plymouth, England  
 Durham, N. C.  
 Cherryville, N. C.  
 Monetta, S. C.  
 Durham, N. C.  
 Durham, N. C.  
 Mt. Sterling, Ohio  
 Johnson City, Tenn.  
 Eagle Springs, N. C.  
 Page, Va.  
 Durham, N. C.  
 Durham, N. C.  
 Durham, N. C.  
 Medellin, Colombia, S. A.  
 Medellin, Colombia, S. A.  
 Raymond, Miss.  
 Union, N. J.  
 Montreal, Quebec, Canada  
 Oak Grove, Mo.

Faison, Alzata C.  
 Gambill, Frances E.  
 Gardner, Beatrice  
 Girardet, Elizabeth E.  
 Hallett, Sarah Louise  
 Harris, Jeanette Huie (Mrs.)  
 Heffernan, Elizabeth A.  
 Helms, Nina Cekich  
 Herndon, M. Yvonne  
 Holder, Florence Davis (Mrs.)  
 Holder, Hazel Elizabeth  
 Holloway, Naoma  
 Hoover, Faith (Mrs.)  
 Hostetler, Cecile Campbell (Mrs.)  
 Hughes, Martha Bee  
 Hultin, Virginia Rose  
 Humphrey, Alice N. (Mrs.)  
 Huston, Miriam Louise  
 Jaeger, Genevieve Johanna  
 Jagiello, Helen Dolores  
 Johnson, June Porter  
 Johnson, Kathryn White (Mrs.)  
 Kenney, Doris Jean  
 Kyle, Helena Dutton (Mrs.)  
 Lachicotte, Ethel Marian  
 Ledford, Ethel Arleen  
 Luedecke, Amanda Caroline  
 Mallet, Irene  
 Mason, Lillian Gunter  
 McCormick, Nellie Roselyn  
 McNurlen, Bonnie Compton  
 Melvin, Betty Lou  
 Melvin, Margaret  
 Menefee, Mary Ann  
 Moll, Mary Lou  
 Moss, Elsie Gertrude  
 Moulton, Susanne Lynas  
 Nalley, Maybelle  
 Newton, Marietta  
 Oyler, Helen  
 Parker, Winifred McIlwaine  
 Parker, Wixie  
 Pickard, Annie Sue  
 Prevatt, Sara Carolyn  
 Purkall, Maude Ella  
 Raabe, LaWanda Marcella  
 Reese, Eva O. (Mrs.)  
 Renn, Lydia Steele (Mrs.)  
 Romano, Joanna Phyllis  
 Russell, Kathryn D.  
 Sandstrom, Oma Louise  
 Schall, Betty Anne  
 Schellenberg, Shirley Anne  
 Schemel, Marjorie Mae  
 Scott, Martha Ellen (Mrs.)  
 Sears, Laura Alice  
 Shaw, Barbara Jane  
 Sites, Patricia Elizabeth  
 Smith, Lenora Ruth  
 Sproul, Ward Pauline  
 Standard, Jean Elizabeth  
 Stearns, Doris Fales (Mrs.)  
 Stewart, Mildred Louise  
 Sutherland, Doty Louise  
 Swofford, Clara  
 Teal, Betty Jean  
 Thomas Corina  
 Thompson, Winifred Lee  
 Tilley, Katherine Estelle  
 Trent, Mary B. (Mrs.)  
 Ware, Mary Jane  
 Weatherman, Lucile Leona  
 White, Lois Glenn  
 Williams, Ialeen Andrews (Mrs.)  
 Wilson, Pearl Mae  
 Winfree, Elsie Louise  
 Wright, Barbara Jeanne  
 Yeager, Tessie Frances

Greensboro, N. C.  
 Elkin, N. C.  
 Durham, N. C.  
 Lynn, Mass.  
 Durham, N. C.  
 Durham, N. C.  
 East Mauch Chunk, Pa.  
 Durham, N. C.  
 Durham, N. C.  
 Princeton, N. C.  
 Winston-Salem, N. C.  
 Greensboro, N. C.  
 Durham, N. C.  
 West Jefferson, N. C.  
 Bartow, Fla.  
 Quincy, Mass.  
 Durham, N. C.  
 Altoona, Pa.  
 Waterloo, Ill.  
 Winchester, Va.  
 Winston-Salem, N. C.  
 Durham, N. C.  
 Harrisonburg, Va.  
 Lexington, Ky.  
 Pawley's Island, S. C.  
 Harrisburg, N. C.  
 Jersey City, N. J.  
 Durham, N. C.  
 Morrisville, N. C.  
 Fort White, Fla.  
 W. Des Moines, Iowa  
 Shallotte, N. C.  
 Jacksonville, Fla.  
 Luray, Va.  
 Norristown, Pa.  
 Emporia, Va.  
 Hillsboro, N. C.  
 Easley, S. C.  
 Bradford, Pa.  
 Durham, N. C.  
 Raleigh, N. C.  
 Durham, N. C.  
 Durham, N. C.  
 Wilmington, N. C.  
 Augusta, Ga.  
 Southgate, Ky.  
 Durham, N. C.  
 Durham, N. C.  
 Miami, Fla.  
 St. Louis, Mo.  
 Daytona Beach, Fla.  
 Brentwood, Mo.  
 Lancaster, S. C.  
 Bucyrus, Ohio  
 Durham, N. C.  
 Norfolk, Va.  
 Nutley, N. J.  
 Upper Treet, W. Va.  
 Lumberton, N. C.  
 Pine Bluff, N. C.  
 Salem, Va.  
 Wilmington, N. C.  
 Johnson City, Tenn.  
 Cincinnati, Ohio  
 Charlotte, N. C.  
 Pine Bluff, N. C.  
 Ferrum, Va.  
 Durham, N. C.  
 Mt. Airy, N. C.  
 Durham, N. C.  
 Dallas, Texas  
 Winston-Salem, N. C.  
 Atlanta, Ga.  
 Sparta, N. C.  
 Durham, N. C.  
 Durham, N. C.  
 McKenzie, Tenn.  
 Jacksonville, Fla.

# *The Graduate School of Arts and Sciences*

## ACADEMIC YEAR 1950-51

- Abbot, William Wright, III, A.B. (University of Georgia); A.M. (Duke University), History, Louisville, Ga.
- Adam, Gunther (foreign student), Political Science, Heidelberg, Germany.
- Adams, Henry Bethune, A.B. (University of North Carolina), Psychology, Lenoir, N. C.
- \*Adderhold, Clarence Cecil, B.S. (Appalachian State Teachers College); B.D. (Gettysburg Lutheran Theological Seminary), Sociology, Hudson, N. C.
- Alford, Cecil Wylie, B.A., M.A. (Texas Christian University), Sociology, Durham, N. C.
- Allen, Ray Maxwell, A.B. (Southwestern College at Memphis); B.D. (Duke University), Religion, Durham, N. C.
- Allen, William Francis, B.S. (Cornell University), History, Salisbury, Md.
- Allen, William Richard, B.A. (Cornell College, Iowa), Economics, Chicago, Ill.
- Allenson, Douglas Rogers, A.B. (Oberlin College), Chemistry, Glen Ellyn, Ill.
- Altman, Jean, A.B. (Coker College), English, Myrtle Beach, S. C.
- Anderson, Donald Kennedy, Jr., B.A. (Yale University); M.A. (Northwestern University), English, Evanston, Ill.
- Anderson, Lucian Dumas, A.B. (Winthrop College); A.M. (Duke University), English, Seneca, S. C.
- Anderson, Norman Gulack, A.B., A.M. (Duke University), Zoology, Minneapolis, Minn.
- Anderson, Roy Stuart, A.B. (Clark University); A.M. (Dartmouth College), Physics, Agawam, Mass.
- Armstrong, Florapearl, B.S. (University of Chattanooga), Biochemistry, Lookout Mountain, Tenn.
- Atchison, Ray Morris, A.B. (Howard College); M.A. (Peabody College), English, Birmingham, Ala.
- Bailey, Jep Harmon, B.S. (The Citadel), Physics, Charleston, S. C.
- Bailey, Ruby May, B.A. (University of Chattanooga); M.R.E. (Duke University), Religion, Durham, N. C.
- Baird, Charles William, B.A. (University of Cincinnati), English, Cincinnati, Ohio.
- Ball, Carroll Raybourne, B.A., M.S. (University of Mississippi), Zoology, Hattiesburg, Miss.
- Barger, Ben, A.B. (George Washington University), Psychology, Durham, N. C.
- Barlow, John Alfred, A.B. (Oberlin College), Psychology, Durham, N. C.
- Barnard, Tristram, B.A., M.A. (Syracuse University), English, Meredith, N. H.
- Barnes, Donald Bishop, A.B. (Duke University), Education, Wilson, N. C.
- Barnes, Robert Drane, B.S. (Davidson College), Zoology, Greensboro, N. C.
- Barnes, Wallace, A.B. (Duke University), Political Science, Stewartstown, Pa.
- Barnwell, Pauline Lee, A.B. (Duke University), Education, Atlanta, Ga.
- Barry, Richard Schriver, A.B. (Franklin & Marshall College); A.M. (Duke University), History, Brighton, Mass.
- Batson, Wade Thomas, Jr., B.S. (Furman University); A.M. (Duke University), Botany, Creedmoor, N. C.
- Battle, Guy, A.B., A.M. (Duke University), English, Sumter, S. C.
- Bayless, Philip L., A.B. (Oberlin College), Chemistry, Durham, N. C.
- Beers, Burton Floyd, B.A. (Hobart College), History, Waverly, N. Y.
- Bellamy, Virginia Nelle, B.S. (East Tennessee State College); A.M. (Duke University), Religion, Powell, Tenn.
- Bertram, Orion Marshall, B.A., B.E., M.A. (University of Cincinnati), History, Cookeville, Tenn.
- Bicknese, Gunther (foreign student), English, Westphalia, Germany
- Blackshear, Katharine, B.A. (University of Georgia), Spanish, Atlanta, Ga.
- Blakely, Florence Ella, A.B. (Presbyterian College, S. C.); B.S. in L.S. (Peabody College), History, Clinton, S. C.
- Bleke, Robert Charles, A.B. (Swarthmore College), Psychology, Fort Wayne, Ind.
- Blossom, Thomas, A.B. (Amherst College); A.M. (Columbia University), History, Creedmoor, N. C.
- Boardman, William K., B.S. (University of Southern California), Psychology, Atlanta, Ga.
- Bormann, Frederick, B.S. (Rutgers University); A.M. (Duke University), Botany, Westwood, N. J.
- Bourdeau, Philippe F. J. (foreign student), Botany, Prov. Namur, Belgium.
- Bowden, Elbert Victor, B.A. (University of Connecticut), Economics, Wilmington, N. C.
- Breibart, Sidney, B.S. (College of Charleston), Physiology, Charleston, S. C.
- Brasen, Wallace Raymond, B.A. (Oberlin College), Chemistry, Cleveland, Ohio
- Brewster, James Pendleton, A.B., M.A. (Duke University), Mathematics, Clemson, S. C.
- Bright, William Morgan, B.S., B.A. (Geneva College), Education, Aliquippa, Pa.
- Briskin, Gerald Jeffrey, A.B. (University of Michigan), Psychology, Brooklyn, N. Y.
- Brodhag, Alex Edgar, Jr., A.B. (Oberlin College), Chemistry, Charleston, W. Va.
- Brown, Joshua Robert C., A.B., A.M. (Duke University), Zoology, Durham, N. C.
- Bryant, Ralph Clement, B.S. (Yale University); M.F. (Yale School of Forestry), Forestry, Fort Collins, Colo.
- Brysk, Henry, B.S. (College of the City of New York); M.S. (University of Pennsylvania), Physics, New York, N. Y.
- Buchanan, Edith, A.B. (Meredith College), English, Cullowhee, N. C.
- Burkus, Jean Casale, A.B. (Hunter College), Zoology, Ozone Park, N. Y.
- Burkus, John, B.S. (Rutgers University), Chemistry, Clarksville, Pa.

\* Special student.



- Byers, Gordon Cleaves, A.B. (University of Michigan), Mathematics, Durham, N. C.  
 Campbell, Ruth, B.A. (Woman's College, University of North Carolina); M.A. (University of North Carolina), Romance Languages, Greensboro, N. C.  
 Capwell, Richard, Leonard, A.B. (Brown University); M.A. (Yale University), English, East Greenwich, R. I.  
 Carlton, John William, B.A. (Baylor University); B.D. (Duke Divinity School), Religion, Corpus Christi, Texas.  
 Carmean, Willard Handy, B.S. (Pennsylvania State College); M.F. (Duke University), Forestry, Norristown, Pa.  
 Carpenter, Dewey K., B.S. (Syracuse University), Chemistry, Scranton, Pa.  
 Carroll, Kenneth Lane, A.B., B.D. (Duke University), Religion, Easton, Md.  
 Carson, Kyle, A.B. (Flora Macdonald College), Nursing Education, Falling Spring, Va.  
 Carter, Katharine Bradley, A.B. (Shorter College), Education, Durham, N. C.  
 Castor, Charles Robert, B.S. (Baylor University), Chemistry, Concord, N. C.  
 Chaffee, Elmer Fenn, B.S. (University of Idaho); M.S.H.P. (University of North Carolina), Microbiology, Boise, Idaho  
 Chamberlain, John Victor, A.B. (Florida Southern College), Religion, Colwyn, Pa.  
 Chamenian, Iris, B.A. (Adelphi College), English, Rego Park, N. Y.  
 Chen, Tien Chi, B.S. (Brown University), Chemistry, Hongkong, China.  
 Cherry, Leonard Victor, B.S. (College of the City of New York), Chemistry, New York, N. Y.  
 Christison, Isabel B., B.A. (University of Minnesota), Microbiology, St. Paul, Minn.  
 Christke, Herbert, (foreign student), Political Science, Heilbronn, Germany.  
 Christopher, Benjamin Bellows, A.B. (Duke University), Economics, White Stone, Va.  
 Clarke, Joseph I. C., B.S. (Columbia University), Psychology, Miami, Fla.  
 Clendenning, John Robert, B.S. (University of Alabama), Zoology, Huntington, N. Y.  
 Cocke, John, B.S. in M.E. (Duke University), Mathematics, Charlotte, N. C.  
 Cohn, David V., B.S. (College of the City of New York), Biochemistry, New York, N. Y.  
 Cole, Benjamin Theodore, B.S. (Duke University), Zoology, Durham, N. C.  
 Coles, William Jeffrey, B.A. (Northern Michigan College of Education), Mathematics, Ironwood, Mich.  
 Colvin, Ralph Whitmore, B.S. (Lawrence College), Psychology, Appleton, Wis.  
 Cone, Pauline Elizabeth, A.B. (Meredith College), History, Middlesex, N. C.  
 Costlow, John DeForest, B.S. (Western Maryland College); Assoc. in Arts Certificate (Maryland State Teachers College), Zoology, Baltimore, Md.  
 Cox, Gene Spracher, B.S., M.F. (Duke University), Forestry, Durham, N. C.  
 Cox, John Thomas, B.S. (William and Mary College), Physics, Johnstown, Pa.  
 Cox, Samson Arthur, B.S. (William and Mary College), Physics, Johnstown, Pa.  
 Crable, George Francis, B.S. (Geneva College); M.S. (University of Michigan), Physics, Ellwood City, Pa.  
 Creamer, Boyce Harry, A.B. (Furman University); Th.B. (God's Bible College); A.M. (University of Texas), Sociology, Anderson, S. C.  
 Crowell, Robert Merrill, A.B., M.A. (Bowling Green University), Zoology, Canton, Ohio.  
 Cuculo, John Anthony, B.S. (Brown University), Chemistry, Providence, R. I.  
 Cunningham, Noble E., Jr., B.A. (University of Louisville); A.M. (Duke University), History, Louisville, Ky.  
 Curry, Roy Watson, A.B. (Marshall College); A.M. (West Virginia University), History, Bayard, W. Va.  
 Daniels, Boyd Lee, B.A. (College of Wooster); B.D. (McCormick Theological Seminary), Religion, Sandusky, Ohio.  
 Daniels, Mrs. Mina, B.A. (College of Wooster), English, Sandusky, Ohio.  
 Davis, Rodney Oliver, B.S. (Trinity College, Hartford), History, Hartford, Conn.  
 Davis, Wilma Marvette, B.S. (Berea College), Economics, Colquitt, Ga.  
 Dawes, Mary Josephine, A.B. (Duke University), Sociology, Rome, Ga.  
 Deener, David Russell, A.B., M.A. (University of Pittsburgh), Political Science, Oakdale, Pa.  
 Delgado, Nelle Smith, A.B. (Carson-Newman College), Spanish, Wake Forest, N. C.  
 Delhomme, George A., Jr., B.A., M.A. (University of Toronto), English, Houston, Texas.  
 Dietrich, Harry Schuette, Jr., A.B. (Alma College), English, Alpena, Mich.  
 Dortch, Hugh, Jr., B.S. (University of North Carolina); M.D. (Duke University), Zoology, Durham, N. C.  
 Downs, Murray Scott, B.A. (Randolph-Macon College), History, Springfield, Va.  
 Drake, Justus Carlyle, B.A., M.A. (Wake Forest College), English, Wake Forest, N. C.  
 Dratz, Arthur Frederick, A.B. (Duke University), Biochemistry, Oak Hill, N. Y.  
 Drodowski, Eugene, B.A. (Alfred University); A.M. (Duke University), History, New York, N. Y.  
 Dunham, Richard M., B.A. (University of South Carolina), Psychology, Jacksonville, Fla.  
 Easterling, Henry Benjamin, B.S. (Mississippi Southern College); M.A. (University of Alabama), Education, Laurel, Miss.  
 Eckert, Edward Arthur, A.B. (Brooklyn College); M.S. (Massachusetts Institute of Technology), Microbiology, Durham, N. C.  
 Edgerton, Jesse Wilbert, B.S. (Guilford College); M.A. (University of Florida), Psychology, Pikeville, N. C.  
 Elliott, Don R., B.A. (Henderson State Teachers College); A.M. (Duke University), Political Science, Arkadelphia, Ark.  
 Emma, Ronald David, B.B.A. (College of the City of New York), English, New York, N. Y.  
 Esthus, Raymond Arthur, A.B. (Florida Southern College), History, Sarasota, Fla.  
 Fisher, William David, A.B. (Duke University), Zoology, Roxboro, N. C.  
 Flood, David Wall, A.B. (Grinnell College), English, Evanston, Ill.  
 Folkemer, Clarence Edward, A.B. (Duke University), English, York, Pa.  
 Foreman, Charles William, B.A. (University of North Carolina), Physiology, Moultrie, Ga.  
 Francisco, Noel, A.B., B.D. (Drake University), Sociology, Centerville, Iowa.

- Frayser, Katherine Regina, A.B. (Randolph-Macon Woman's College), Biochemistry, Lynchburg, Va.
- Friedman, Edward Leonard, B.S. (College of the City of New York), Psychology, New York, N. Y.
- Friend, Fred Erwin, A.B., A.M. (Duke University), English, Nashville, Tenn.
- Frostick, Frederick Charles, B.S. (Duke University), Chemistry, Maxton, N. C.
- Frymier, Homer Burgwin, B.A. (West Virginia University), Political Science, S. Charleston, W. Va.
- Fuchs, Joseph Paul, B.S. (U. S. Naval Academy), Education, Durham, N. C.
- Gable, Ralph William, B.S. (University of Texas), Chemistry, San Antonio, Texas.
- Gale, Glen Roy, A.B. (Duke University), Physiology, Mt. Croghan, S. C.
- Ganyard, Robert Loyal, B.A., M.A. (University of Buffalo), History, Ashtabula, Ohio.
- Garnett, Ellen Marshall, A.B. (Duke University), Physics, Birmingham, Ala.
- Gervasi, Jay Anthony, A.B. (Cornell University), Chemistry, Brooklyn, N. Y.
- Gibbons, John Howard, B.S. (Randolph-Macon College), Physics, Harrisonburg, Va.
- Gibbs, Norman Brantley, B.A. (Southwestern at Memphis); B.D. (Louisville Presbyterian Theological Seminary), Religion, Memphis, Tenn.
- Girdner, John Byron, B.A., M.A. (University of Utah), Psychology, West Bend, Wis.
- Glad, Andrew J., III, B.S., M.S. (Duquesne University), Biochemistry, Pittsburgh, Pa.
- Glanan, Paul Thompson, A.B. (Grinnell College), English, Jewell, Iowa.
- Godfrey, Robert Kenneth, B.A. (Maryville College); M.A. (Harvard University), Botany, Raleigh, N. C.
- Godsey, James, B.S. (Wake Forest College), Chemistry, Durham, N. C.
- Goldstone, Sanford, B.S. (College of the City of New York), Psychology, New York, N. Y.
- Gordon, Hiram Leonard, A.B. (University of Wichita); A.M. (University of Kansas), Psychology, Morrilton, Ark.
- Gorrossi, Flora E., B.A. (Seton Hall College); M.S. (Catholic University), Zoology, Greensburg, Pa.
- Gossett, Charles Robert, B.S. (Duke University), Physics, Arlington, Va.
- Graves, Robert Dorset, A.B. (Grinnell College), English, Grinnell, Iowa.
- Grayson, William Curtis, Jr., S.B. (University of Chicago), Physics, Bay Springs, Miss.
- Green, Irving, B.A. (New York University); M.S. (Fordham University), Biochemistry, Durham, N. C.
- Green, Walter Smithers, B.S. (Dickinson College); B.D. (Garrett Biblical Institute), Religion, Jackson Center, Ohio.
- Greenberg, Arthur, B.A. (New York University), Psychology, New York, N. Y.
- Greenhow, Charles Richard, B.S.E.E. (North Carolina State College), Physics, Covington, Ky.
- Guilds, John Caldwell, Jr., B.A. (Wofford College); A.M. (Duke University), English, Columbia, S. C.
- Hakala, Maire Tallervo, M.Sc. (University of Helsinki), Biochemistry, Helsinki, Finland.
- Hall, Milton McLean, Jr., B.A. (Birmingham-Southern College), History, Mobile, Ala.
- Hallett, Stanley J., A.B. (Dakota Wesleyan University), Sociology, Durham, N. C.
- Hamilton, Harold Philip, A.B. (High Point College); B.D. (Duke University), Religion, Durham, N. C.
- Hamilton, Marian B., A.B. (Georgia State College for Women); A.M. (Duke University), Sociology, Warwick, Ga.
- Hamilton, Thomas Theodore, A.B. (Central Missouri State College); A.M. (Duke University), History, Independence, Mo.
- Hampe, Wolfgang (foreign student), Political Science, Hesse, Germany.
- Hamrick, Emmett Willard, A.B. (University of North Carolina), Religion, Shelby, N. C.
- Hamrick, James Lehman, B.S. (Furman University), Political Science, Shelby, N. C.
- Hance, Charles Robert, B.S. (University of Illinois), Chemistry, Marengo, Ill.
- Hancock, Carolyn Lois, A.B. (Georgia State College for Women), Sociology, Atlanta, Ga.
- Harden, Nell, A.B. (Catawba College), English, Salisbury, N. C.
- Hardin, Hilliard Frances, A.B., A.M. (Duke University), Microbiology, Long Beach, Calif.
- Harris, Carl Vernon, B.A. (Wake Forest College); B.D., S.T.M. (Yale University), Religion, Morganton, N. C.
- Harris, James Thurloe, Jr., B.S. (The Citadel); A.M. (Duke University), Chemistry, Spartanburg, S. C.
- Harris, Jesse Graham, Jr., B.A. (Harvard University), Psychology, Jacksonville, Fla.
- Hartle, Douglas Graham, B.A. (Carleton College), Economics, Ontario, Canada.
- Hassinger, William Edward, Jr., B.S. (Virginia Polytechnic Institute), Physics, Bristol, Tenn.
- Hausman, Carl R., A.B. (University of Louisville), Philosophy, Coral Gables, Fla.
- Hegeland, Hugo Oscar, A.M. (University of Gothenburg), Economics, Gothenburg, Sweden.
- Heimberg, Murray, B.S., M. Food S. (Cornell University), Biochemistry, Jackson Heights, N. Y.
- Helmhold, F. Wilbur, B.A. (Howard College), Religion, Springville, Ala.
- Henchie, Janet Hamilton, B.S. (Duke University), Physics, Park Ridge, Ill.
- Herbert, Mary Eloise, A.B. (Winthrop College), Spanish, Piedmont, S. C.
- Herbst, Robert Taylor, A.B. (Duke University); M.S. (North Carolina State College), Mathematics, Great Bridge, Va.
- Hester, Rupert, B.A. (Millsaps College); A.M. (Columbia University), Psychology, Mize, Miss.
- Highfill, William Lawrence, B.A. (Wake Forest College); B.D. (Southern Baptist Theological Seminary), Religion, Winston-Salem, N. C.
- Hilgartner, Margaret Wehr, B.A. (Bryan Mawr College), Zoology, Baltimore, Md.
- Hill, Robert Matteson, A.B. (Cornell University), Physics, Durham, N. C.
- Hirata, Arthur Atsunobu, B.S. (Duke University), Zoology, Norfolk, Va.

- Hobbs, Grimsley Taylor, A.B. (Guilford College); A.M. (Haverford College), Philosophy, Chapel Hill, N. C.
- Hoffman, Hugo (foreign student), Political Science, Wuerttenberg, Germany.
- Holder, Nellie Melba, A.B. (Maryville College, Tenn.), Zoology, Andrews, N. C.
- Hollyday, Frederic B. M. B.A. (Washington & Lee University); A.M. (Duke University), History, St. Michaels, Md.
- Hones, Edward Wheeler, B.S., A.M. (Duke University), Physics, Durham, N. C.
- Horowitz, Ada Rakos, B.A. (New York University); M.S. (New York University), Zoology, Forest Hills, L. I., N. Y.
- Hosea, Addison, B.A. (Atlantic Christian College); B.D. (University of the South), Religion, Clinton, N. C.
- Howell, John McDade, A.B., M.A. (University of Alabama), Political Science, Fairfax, Ala.
- Hunter, Sylvia Fishman, A.B. (Brooklyn College); M.S.P.H. (University of North Carolina); A.M. (Duke University), Biochemistry, Brooklyn, N. Y.
- Iutt, Paul Jones, B.S., A.M. (Columbia University), Psychology, Durham, N. C.
- Hyland, Kerwin Ellsworth, Jr., B.S. (Pennsylvania State College); M.S. (Tulane University), Zoology, York, Pa.
- Irwin, Evelyn Simpson, B.S. (State Teachers College, Trenton, N. J.), Education, Delaware City, Del.
- Irwin, Harry Penrose, Jr., B.A. (University of Delaware); M.Ed. (Duke University), Education, Durham, N. C.
- Ives, Sidney Edwin, A.B. (Harvard University); M.A. (Columbia University), English, High Point, N. C.
- \*Jackson, Hilliard, B.S. (University of Arkansas); M.S. (Louisiana State University), Fayetteville, Ark.
- Jackson, William T., B.Sc. (Ohio State University); M.S. (University of Tennessee), Botany, Waverly, Ohio.
- Jackson, Winston Jerome, Jr., B.S. (Virginia Polytechnic Institute), Chemistry, Kingsport, Tenn.
- James, Norman, B.A. (Yale University), English, Washington, D. C.
- Jeffer, Herman Matthew, A.B. (Calvin College), English, Midland Park, N. J.
- Jennings, Charles Warren, B. of Engineering (University of Toledo); M.S. (University of California), Chemistry, Washington, D. C.
- Jensen, Clair Lee, A.B. (Allegheny College), Sociology, New Cumberland, Pa.
- Jodrey, Louise Harriet, B.S. (Dalhousie University), Zoology, Nova Scotia, Canada.
- Johnson, Charles Everest, B.A. (University of the South); M.A. (University of Alabama), English, Montgomery, Ala.
- Johnson, Charles Minor, Jr., B.E. in C.E. (Vanderbilt University), Physics, Nashville, Tenn.
- Johnson, Richard Stebbins, B.S., M.S. (Illinois Institute of Technology), Chemistry, Maywood, Ill.
- Jones, Wayland Horace, B.A., M.A. (University of Richmond), History, Blackstone, Va.
- Josefiak, Eugene Joseph, B.A., M.A. (University of Buffalo), Microbiology, Buffalo, N. Y.
- Joyner, Weyland Thomas, Jr., B.S. (1951) (Hampden-Sidney College), Physics, Windsor, Va.
- Judge, William Arthur, B.S. (Loyola College), Chemistry, Baltimore, Md.
- Kambara, Tomihiko (foreign student), Political Science, Odawara-city, Japan.
- Kardon, Samuel, A.B. (Emory University), Chemistry, Durham, N. C.
- Karmazin, Michael L., A.B. (Duke University), History, Philadelphia, Pa.
- Kaufman, Willis M., B.A. (Goshen College), Chemistry, Middlebury, Ind.
- Keirce, William Francis, B.M.E., M.A. (University of Louisville), English, Louisville, Ky.
- Kenion, Alonzo Williams, A.B., A.M. (Duke University), English, Hillsboro, N. C.
- \*Kenyon, Van Leslie, Jr., B.S. (University of North Carolina), Hillsboro, N. C.
- Kidder, Maurice Arthur, B.A. (University of New Hampshire); S.T.B. (Boston University); S.T.M. (Yale University), Religion, Chapel Hill, N. C.
- Leake, William Walter, B.S. (Duquesne University), Chemistry, Dravosburg, Pa.
- Lee, Henry Bartly, B.A. (Bradley University), Political Science, Wilmington, N. C.
- Lott, Peter F., B.S., M.S. (St. Lawrence University), Chemistry, Binghamton, N. Y.
- Lowenherz, Robert Jack, B.A. (Queens College), English, Long Island City, N. Y.
- Luck, Clarence Frederick, Jr., B.A. (University of Buffalo), Physics, Buffalo, N. Y.
- Luvaas, Morten Jay, B.A. (Allegheny College, Pa.), History, Meadville, Pa.
- Lyles, James Robert, Jr., A.B. (Wofford College); M.A. (University of South Carolina), Education, Heath Springs, S. C.
- McCandless, Margaret Susan, B.A. (Winthrop College), Chemistry, Chester, S. C.
- McCrary, Martha Penn, A.B. (Duke University), English, Lexington, N. C.
- McDermott, Robert Emmet, B.S.F., M.S. (Iowa State College), Botany, Maywood, Ill.
- MacIntosh, Fred Henry, A.B. (University of South Carolina); A.M. (Duke University), English, Clemson, S. C.
- McKinney, Gordon R., A.B. (DePauw University); M.S. (Notre Dame), Physiology, Indianapolis, Ind.
- McMillen, Shirley M., B.S. (Iowa State College), Botany, Clarion, Iowa.
- McNurlen, Lewis J., B.A., M.A. (Drake University), Sociology, Perry, Iowa.
- MacPherson, Withrow Chase, B.A. (University of Virginia), Romance Languages, Waynesboro, Va.
- Maldonado-Clark, Nelly, B.S. (University of Puerto Rico), Chemistry, Puerto Rico.
- Man, Eugene Herbert, A.B. (Oberlin College), Chemistry, Slarks Green, Pa.
- Manly, Jethro Oates, B.S. (College of William and Mary), Botany, Durham, N. C.
- Manyik, Robert Michael, B.S. (University of California), Chemistry, Berkeley, Calif.
- Marple, Dorothy Jane, A.B. (Ursinus College); M.A. (Syracuse University), Education, Spring House, Pa.

\* Special student.



- Martin, Robert D., B.S. (East Carolina Teachers College); A.M. (George Washington University), Education, Rich Square, N. C.
- Martin, Betty Jean, A.B. (Winthrop College), Zoology, Lyman, S. C.
- Mastrobattista, Julius, B.A. (Drew University), Political Science, Morristown, N. J.
- Merkel, Erwin (foreign student), Political Science, Marburg, Germany.
- Mesones, Jean Nancy, B.A. (University of Buffalo), Psychology, Salem, Va.
- Miller, Harry Kreiger, Jr., B.S. (Lebanon Valley College); M.A. (Lehigh University), Education, Hampton, Va.
- Miller, William Starr, B.S., M.S. (University of Georgia), Education, Plainville, Ga.
- Mockler, Richard Calvin, B.S. (Northwestern University), Physics, Lac de Flambeau, Wis.
- Moore, Jack Warren, A.B. (Olivet Nazarene College); B.D. (Duke University), Religion, Durham, N. C.
- Moore, Rayburn Sabatsky, B.A., A.M. (Vanderbilt University), English, West Helena, Ark.
- Morgan, Olen Eben, A.B. (Duke University), Physiology, Albemarle, N. C.
- Morris, Samuel Barrineau, A.B. (Duke University); A.M. (University of North Carolina), Education, Durham, N. C.
- Morris, Thomas Wendell, B.S. (Duke University), Physics, Durham, N. C.
- Morris, William Clews, B.A. (The Rice Institute), English, San Antonio, Texas.
- Moudy, James M., B.A., B.D. (Texas Christian University), Religion, College Station, Texas.
- Muldrow, Mary Frances, A.B. (Georgia State College for Women); M.A. (Duke University), Romance Languages (French), Milledgeville, Ga.
- Mullen, John C., B.A. (Wayne University); M.S. (Alabama Polytechnic Institute), English, Durham, N. C.
- Murphy, Frederic Francis, B.A. (Milton College), Physiology, Janesville, Wis.
- Nelson, William Ralph, A.B. (University of Miami); A.M. (University of Texas), English, Miami, Fla.
- Newcomer, Richard Seyler, B.A. (Ursinus College); A.M. (Duke University), Education, Narvon, Pa.
- \*Newsome, John Robert, B.S. (University of North Carolina), Chemistry, Durham, N. C.
- Nichols, Lawrence Richard, B.A. (Wake Forest College), History, Winston-Salem, N. C.
- Nielsen, Kai Edward, B.A. (University of North Carolina), Philosophy, Chapel Hill, N. C.
- Noble, Lawrence Everman, Jr., B.A. (University of Mississippi), Political Science, Grenada, Miss.
- Noggle, Burl Lee, A.B. (Duke University), History, Durham, N. C.
- Ogden, Archibald P., B.A. (University of the South), Philosophy, Sewanee, Tenn.
- Okawa, Yoshio (foreign student), Political Science, Osaka-shi, Japan.
- Olson, Frank Roland, B.A. (Alfred University); M.A. (Kent State University), Mathematics, Jamestown, N. Y.
- Padgett, Lawrence Edwin, B.A. (University of Houston), English, Tazewell, Va.
- Fannill, Harry Burnell, B.A. (Randolph-Macon College); B.D. (Duke University), Religion, Ashland, Va.
- Parrish, Robert Guy, B.S. (University of Wisconsin), Biochemistry, Eau Clair, Wis.
- Parsons, Oscar Albert, A.B., M.A. (Temple University), Psychology, Durham, N. C.
- Patti, Antoinette Anne, B.S. (College of St. Rose); M.S. (Rensselaer Polytechnic Institute), Microbiology, Troy, N. Y.
- Patton, E. Gibbs, B.A. (Yale University), Botany, Greenville, S. C.
- Perkins, James Crosswell, B.S. (Princeton University); B.D., S.T.M. (Oberlin College), Religion, San Antonio, Texas.
- Perry, Frances Hunter, B.S. (Wake Forest College), Chemistry, Durham, N. C.
- Peterson, Margaret Anne, B.S. (Georgia State College for Women), Bacteriology, Douglas, Ga.
- Peyton, Philip Barbour, Jr., B.E.E. (University of Virginia), Physics, Davidson, N. C.
- Phillips, John Nova, A.B. (New York University), English, New York, N. Y.
- Pierce, John Arthur, A.B. (Duke University), Physics, Ocean Grove, N. J.
- Pitts, Anna Catherine, B.A. (Winthrop College); A.M. (Mt. Holyoke College), Chemistry, Seneca, S. C.
- Pohrer, Robert George, B.S. (St. Louis University), Mathematics, St. Louis, Mo.
- Porter, Bernard, B.S. (College of the City of New York), Chemistry, Bronx, N. Y.
- Porter, Hardin Kibbe, B.S. (University of Texas); M.S. (Georgia Institute of Technology), Chemistry, Philadelphia, Pa.
- Potter, Richard Austin, B.S. (Rollins College), Chemistry, Winter Park, Fla.
- Powell, William Allan, B.S. (Wake Forest College), Chemistry, Wallace, N. C.
- Pratt, Judith Dunlap, B.S., M.S. (University of New Hampshire), Zoology, Antrim, N. H.
- Pullig, Flora Margaret, A.B. (Hendrix College), English, Stuttgart, Ark.
- Puterbaugh, Walter H., Jr., A.B. (Duke University), Chemistry, Johnstown, Pa.
- Ramsay, Edmund George, Jr., A.B. (Duke University), History, Lincolnton, N. C.
- Ransauer, Robert Wayne, A.B. (Duke University), History, Newport News, Va.
- Ratliff, Charles Edward, Jr., B.S. (Davidson College), Economics, Morven, N. C.
- Rawls, Horace Darr, B.S., M.S. (N. C. State College), Sociology, Raleigh, N. C.
- Rayle, Robert Franklin, B.S. (Clemson College), English, Eastover, S. C.
- Reece, James Brady, A.B. (Johns Hopkins University); A.M. (Duke University), English, Lenoir, N. C.
- Reichert, Irene A. Nassau, A.B. (University of Alabama), German, Boca Raton, Fla.
- \*Reichle, Paul A., B.S., M.S. (University of Pennsylvania), Physics, Durham, N. C.
- Reid, Ann Townsend, A.B. (Duke University), Mathematics, St. Augustine, Fla.
- Reveley, Walter Taylor, A.B. (Hampden-Sydney College); B.D. (Union Theological Seminary), Religion, Durham, N. C.
- Richter, Melissa Lewis, A.B. (Sarah Lawrence College), Physiology, White Plains, N. Y.
- Robertson, Clyde Henry, Jr., B.S. (Wofford College), Zoology, Heath Springs, S. C.

\* Special student.

- Robinson, Betty Belle, B.A. (McMaster University); A.M. (Duke University), Economics, Ontario, Canada.
- Robinson, Hugh Gettys, B.A. (Emory University), Physics, Atlanta, Ga.
- Rochlin, Alan Myron, B.S. (Rutgers University), Psychology, Glen Ridge, N. J.
- Rohrer, Robert Harry, B.S., M.S. (Emory University), Physics, Atlanta, Ga.
- Rosenberg, Alexander F., B.S. (City College of New York), Chemistry, Flushing, N. Y.
- Rosoff, Morton, B.A., M.A. (Brooklyn College), Chemistry, Brooklyn, N. Y.
- Routsis, George, B.A. (American International College), History, Middletown, Conn.
- Rowles, William John, A.B. (Ohio University), Education, Canton, Ohio.
- Rupp, Joseph Charles, B.S. (Muhlenberg College), Biochemistry, Allentown, Pa.
- Russell, Mattie, B.A., M.A. (University of Mississippi), History, Durham, N. C.
- Sandetur, Earl Wilton, A.B. (Duke University), Education, Winston-Salem, N. C.
- Sastri, M. Lakshmi N., B.Sc., M.Sc. (Benares Hindu University), Physics, Madras Prov., India.
- Savage, Helen Ruth Barnes, B.S. (State Teachers College, Jacksonville, Ala.); M.A. (Emory University), Philosophy, Albertville, Ala.
- Sawin, Horace Lewis, A.B., M.A. (University of Kentucky), English, Lexington, Ky.
- Searrow, Howard Albert, A.B. (Duke University); M.A. (Wayne University), Political Science, Detroit, Mich.
- Schaller, Howard Graham, A.B. (Duke University); M.A. (Northwestern University), Economics, Auburn, Ala.
- Schmale, Marion L., B.S. in Ed. (Rider College), Spanish, Moosic, Pa.
- Score, John Nelson Russell, II, B.A. (Southwestern University); B.D. (Garrett Biblical Institute), Religion, Georgetown, Texas.
- Seevers, Delmar Oswald, B.S. (Duke University), Physics, St. Johns, Kan.
- Seibert, Julien Carl, A.B. (Franklin College), Sociology, Queens Village, N. Y.
- Seitz, Roland (foreign student), Political Science, Hersbruck, Germany.
- Seyler, William Charles, A.B., M.A. (University of Pittsburgh), Political Science, Durham, N. C.
- Sharp, Helen Sherman, B.A. (American International College), English, Saunderstown, R. I.
- Sharp, Henry, Jr., B.E. (Vanderbilt University); A.M. (Duke University), Mathematics, Nashville, Tenn.
- Shear, William Merrill, A.B. (Ball State Teachers College), Political Science, Muncie, Ind.
- Shepard, Maurice Charles, B.S., M.S. (University of Wisconsin), Bacteriology, Durham, N. C.
- Shih, Chung-Wen, B.A. (St. John's University, Shanghai); A.M. (Duke University), English, Shanghai, China.
- Siddall, Thomas Henry, III, A.B. (University of North Carolina); M.S. (University of Chicago), Chemistry, Sumter, S. C.
- Simmons, Bowen Eugene (Duke University), Physics, Opp, Ala.
- Simon, John, B.A. (Hobart College), History, Mt. Pleasant, Pa.
- Sinclair, Peter Kirk, B.A., M.A. (McGill University), Economics, Quebec, Canada.
- Slaughter, Grimes Gibbons, B.S. (Duke University), Physics, New Bern, N. C.
- Smiley, Edward Forbes, II, B.S. (University of Connecticut); M.S. (Brown University), Physics, N. Attleboro, Mass.
- Smith, Calvin Clifton, A.B. (Capital University), English, New Vienna, Ohio.
- Smith, Donald George, B.A. (McGill University), English, Ottawa, Canada.
- Smith, Kenneth Lee, A.B. (University of Richmond); B.D. (Crozer Seminary), Religion, Exmore, Va.
- Smith, LeRoy Walter, B.A. (The American University); M.A. (George Washington University), English, Arlington, Va.
- Smith, Mary Brent, B.S. in Ed. (Georgia State College for Women), Education, Knoxville, Ga.
- Smith, Richard Clark, B.A. (Vanderbilt University), Botany, McKenzie, Tenn.
- Smyre, Melford A., A.B. (Duke University), Sociology, Newton, N. C.
- Smythe, William Rodger, Jr., B.S. (Rollins College), Mathematics, Orlando, Fla.
- Snyder, Gilbert, B.S. (University of South Carolina), Psychology, Roanoke, Va.
- Southern, J. Albert, A.B. (Duke University), Education, Madison, N. C.
- Spencer, Stephen Marion, Jr., B.S. (Wake Forest College); A.M. (Duke University), Mathematics, Wilmington, N. C.
- Sperry, William Hartley, A.B. (Gettysburg College), History, Gettysburg, Pa.
- Stalzer, Robert Frederick, B.S. (Kent State University); A.M. (Duke University), Chemistry, Cuyahoga Falls, Ohio.
- Stanback, Thomas Melville, Jr., B.S.C. (University of North Carolina); M.B.A. (Harvard University), Economics, Chapel Hill, N. C.
- Steele, Arthur Robert, A.B. (University of California); M.A. (University of New Mexico), History, Oakland, Calif.
- Stephenson, Harold Patty, B.S. in M.E., A.M. (Duke University), Physics, Reidsville, N. C.
- Stevens, Harold Wallace, A.B. (Mississippi Southern College), History, Gulfport, Miss.
- Stewart, Alta Theodore, Jr., A.B. (Duke University), Chemistry, Vienna, W. Va.
- Stockdale, Harry Foster, B.S. (Slippery Rock State Teachers College), History, Durham, N. C.
- Strain, Edward Richard, Jr., A.B. (Butler University), Psychology, Indianapolis, Ind.
- Suggs, Marion Jack, B.A. (University of Texas); B.D. (Texas Christian University), Religion, Gladewater, Texas.
- Sulzer, Richard Lee, A.B. (Duke University), Psychology, S. Norwalk, Conn.
- Tankin, Arthur S., A.B. (Harvard University), Psychology, Brookline, Mass.
- Taylor, Delores Arlene, B.A. (Milwaukee-Downer College), Sociology, Milwaukee, Wis.
- Taylor, George Aiken, A.B. (Presbyterian College); B.D. (Columbia Theological Seminary), Religion, Smyrna, Ga.



- Teets, Bruce E., A.B. (Fairmont State College); M.A. (West Virginia University), English, Terra Alta, W. Va.
- Theus, Richard Barry, B.S. (Stetson University), Physics, Ocala, Fla.
- Thomas, Mary Olive, B.A. (Agnes Scott College); A.M. (University of North Carolina), English, Auburn, Ala.
- Thomas, Richard Russell, B.A. (Western Reserve University), Psychology, Cleveland, Ohio.
- Thompson, Donald Frederick, B.S., M.S. (Tufts College), Chemistry, Brookline, Mass.
- Thompson, Eugene Hester, Jr., A.B., M.A. (University of Kentucky), Romance Languages (French), Lexington, Ky.
- Thornburgh, Conway deC., B.A., M.A. (Tulane University), History, New Orleans, La.
- Thumm, Byron Ashley, B.S. (Morris Harvey College), Chemistry, Charlotte, W. Va.
- Toller, Abe Louis, B.S. in Ed. (Temple University), Physics, Durham, N. C.
- Trapnell, Emily Annette, B.A. (Georgia State College for Women), Spanish, Milledgeville, Ga.
- Tu, Tien Chung, A.B. (Duke University), English, Honan, China.
- Tumblin, John Addison, A.B. (Wake Forest College), Sociology, Newport News, Va.
- Turner, William Calhoun, B.S. (Furman University), Mathematics, Greenville, S. C.
- Tyczkowski, Edward Albert, B.S. (Brown University), Chemistry, Durham, N. C.
- Ulmer, David H., Jr., A.B. (Duke University), Botany, Moorestown, N. J.
- Upson, William Robert, A.B. (George Washington University); M.A. (University of Colorado), Romance Languages, Roanoke, Va.
- Ussery, Lon Esker, B.A. (University of Richmond), Psychology, Wilmington, N. C.
- Veit, Natalie Iris, A.B. (Smith College), Chemistry, Far Hills, N. J.
- Vogel, Ralph Arnold, B.A. (Wagner College); M.A. (University of Buffalo), Bacteriology, Brooklyn, N. Y.
- Von Pruschenk-Lindenhofen, Gunter (foreign student), Political Science, Berlin, Germany.
- Von Stein, Hans (foreign student), Political Science, Hesse, Germany.
- Waggoner, Brooks Milton, A.B. (University of Arkansas); B.D., A.M. (Duke University), Religion, Stillwell, Okla.
- Walker, Thomas Banner, B.A. (Tusculum College, Tenn.), Chemistry, Charleston, Tenn.
- Walker, William Brewster, B.A. (Duke University), Psychology, Bridgeport, Conn.
- Wallace, James Neill, B.S. (Mt. Allison University, Canada), Mathematics, Pontiac, Mich.
- Waller, William Washington, A.B., A.M. (Duke University), Zoology, Washington, D. C.
- Walter, Waldemar Melchert, A.B. (Harvard University), Zoology, Cambridge, Mass.
- Walton, Wesley Mills, B.S. (New Jersey State Normal School); M.Ed. (Duke University), Education, Woodlynn, N. J.
- Ward, William Edward, A.B. (Ohio University), Zoology, Salem, Ohio.
- Webb, Edwin H., B.S. (Duke University), Physics, Roanoke Rapids, N. C.
- Webb, John Maurice, A.B. (Duke University); A.M. (Yale University), History, Durham, N. C.
- Webb, Warren Wright, A.B. (University of North Carolina), Psychology, Salem, Va.
- Webster, James Cumming, Jr., A.B. (Yale University), Psychology, Woodstock, N. Y.
- Weesner, Murrell Davis, A.B. (Tusculum College, Tenn.), English, Morristown, Tenn.
- Weinheimer, Alfred Jehn, B.S., M.S. (Canisius College), Chemistry, Buffalo, N. Y.
- Wenger, Karl Frederick, B.S. (University of Maine); M.F. (Duke University), Forestry, Buckingham, Va.
- Westervelt, Mary Marguerite, A.B. (Adelphi College), English, Brooklyn, N. Y.
- Wheaton, Scott Rodgers, A.B. (Duke University), Economics, Durham, N. C.
- Wiebe, Herman Henry, B.A. (Goshen College); M.A. (State University of Iowa), Botany, Newton, Kan.
- Wiggins, James Wilhelm, B.S. (South Georgia Teachers College); A.M. (Duke University), Sociology, Decatur, Ga.
- Wilcox, William George, B.A. (Stanford University); M.A. (Berkeley Baptist Divinity School); B.D. (Union Theological Seminary), Religion, Folsom, Calif.
- Wiles, Charles Preston, B.A. (Washington College, Maryland); A.M. (Duke University), Religion, Brunswick, Md.
- Wiley, Mary Elizabeth, B.S. (Pennsylvania College for Women), Zoology, Bradford, Pa.
- Wilkerson, Albert Ernest, Jr., A.B. (Duke University), Sociology, Durham, N. C.
- Wilks, Norman Edward, B.S., M.S. (University of Wyoming), Zoology, Laramie, Wyo.
- Williams, Joel Quitman, B.S. (Centenary College); M.S. (Georgia Institute of Technology), Physics, Durham, N. C.
- Williams, William A., Jr., A.B. (Mercer College), Zoology, Macon, Ga.
- Williamson, Mary Christine, A.B. (Meredith College), History, Chadbourne, N. C.
- Wills, Wirt Henry, B.A. (University of Richmond); Botany, Petersburg, Va.
- Wilson, Jane Bliss, A.B. (Duke University); A.B. in L.S. (University of North Carolina), English, Durham, N. C.
- Wingate, Doris A., A.B. (Duke University), Microbiology, Gastonia, N. C.
- Winston, Anthony, B.S. (George Washington University), Chemistry, Durham, N. C.
- Winter, Arthur Bruce, A.B. (Emory University); M.S. (University of Denver), Political Science, Knoxville, Tenn.
- Wishner, Raymond P., B.S. (Northwestern University), Economics, Chicago, Ill.
- Withrow, Stanton Ray, B.S. (Morris Harvey College); M.S. (Northwestern University), Political Science, Charleston, W. Va.
- Witt, Fountain Joel, B.S. (Tennessee Polytechnic Institute), Mathematics, Whitwell, Tenn.
- Wood, Paul R., A.B. (Birmingham-Southern College), French, Birmingham, Ala.
- Wolf, William Ervin, B.A., M.A. (Emory University), Physics, Elmhurst, Ill.
- Workman, George Arthur, B.A. (Hobart College); B.D. (Virginia Theological Seminary), Religion, Oswego, N. Y.
- Worsham, James Essex, Jr., B.S. (University of Richmond); M.S. (Vanderbilt University), Chemistry, Newport News, Va.
- Wurflein, Max (foreign student), Political Science, Ingolstadt, Germany.

Young, James Joseph, A.B. (Mercer University), Economics, Macon, Ga.  
 Zauder, Howard L., A.B. (University of Vermont), Physiology, Kew Garden Hills, L. I., N. Y.  
 Zweifel, Paul Frederick, B.S. (Carnegie Institute of Technology), Physics, New York, N. Y.

## SUMMER OF 1950

Abbot, William Wright, III, A.B. (University of Georgia); A.M. (Duke University), History, Louisville, Ga.  
 Alford, Cecil Wylie, B.A. (Texas Christian University); M.A. (Texas Christian University), Sociology, Durham, N. C.  
 Allen, Ray Maxwell, B.A. (Southwestern College at Memphis); B.D. (Duke University), Religion, Memphis, Tenn.  
 Allen, William Richard, B.A. (Cornell College), Economics, Chicago, Ill.  
 Anderson, Donald K., B.A. (Yale); M.A. (Northwestern University), English, Evanston, Ill.  
 Anderson, Roy Stuart, A.B. (Clark University); A.M. (Dartmouth), Physics, Agawam, Mass.  
 Angley, Mary Elizabeth, A.B. (Woman's College, U. N. C.), History, Lenoir, N. C.  
 Arms, Ida Zerfing, B.S. (Pennsylvania State Teachers College), Education, Dauphin, Pa.  
 Armstrong, Florapearl, B.S. (University of Chattanooga), Biochemistry, Lookout Mountain, Tenn.  
 Bailey, Jep Harmon, B.S. (The Citadel), Physics, Charleston, S. C.  
 Bailey, Ruby May, B.A. (University of Chattanooga); M.R.E. (Duke Divinity School), Religion, Bessemer City, N. C.  
 Baker, Evelyn, A.B. (Winthrop College), English, Pageland, S. C.  
 Ball, Carroll Raybourne, B.A., M.S. (University of Mississippi), Zoology, Montrose, Miss.  
 Barlow, John Alfred, A.B. (Oberlin College), Psychology, Mexico D. F., Mexico.  
 Barnes, Robert Drane, B.S. (Davidson College), Zoology, Greensboro, N. C.  
 Barnes, Wallace, A.B. (Duke University), Political Science, Stewartstown, Pa.  
 Batson, Wade Thomas, Jr., B.S. (Furman University); A.M. (Duke University), Botany, Marietta, S. C.  
 Battle, Guy Arthur, Jr., A.B., A.M. (Duke University), English, Sumter, S. C.  
 Bayless, Philip L., A.B. (Oberlin College), Chemistry, Muncie, Ind.  
 Beaton, James Allen, A.B., A.M. (Duke University), History, Manning, S. C.  
 Benning, Elizabeth Douglass, A.B. (Georgia State College for Women), English, Atlanta, Ga.  
 Blackburn, Jacob Floyd, A.B. (Lenoir-Rhyne College); A.M. (Duke University), Mathematics, Charleston, S. C.  
 Blancett, Rhea Morgan, A.B. (West Liberty State College), Education, New Martinsville, W. Va.  
 Bleke, Robert Charles, A.B. (Swarthmore College), Clinical Psychology, Fort Wayne, Ind.  
 Boardman, William Kilbourne, B.S. (University of Southern California), Psychology, Atlanta, Ga.  
 Bornmann, Frederick Herbert, B.S. (Rutgers University); A.M. (Duke University), Botany, Westwood, N. J.  
 Box, K. K. K., B.A. (Duke University), Education, Durham, N. C.  
 Brewster, James Pendleton, A.B., A.M. (Duke University), Mathematics, Clemson, S. C.  
 Brysk, Henry, B.S. (College of the City of New York); M.S. (University of Pennsylvania), Physics, New York, N. Y.  
 Callahan, Lois Katharine, B.A. (Longwood College), English, Danville, Va.  
 Capwell, Richard Leonard, A.B. (Brown University); M.A. (Yale University), English, East Greenwich, R. I.  
 Carter, Mrs. Katharine Bradley, A.B. (Shorter College), Education, Durham, N. C.  
 Carter, Rodney G., B.S. (Alabama Polytechnic Institute), Education, Durham, N. C.  
 Chilton, James Banks, A.B. (High Point College), Education, Statesville, N. C.  
 Christison, Isabel B., B.A. (University of Minnesota), Mycology, St. Paul, Minn.  
 Clayton, Maurice Hill, B.S. (Wake Forest College); M.E. (N. C. State College), Mathematics, Raleigh, N. C.  
 Cohn, David V., B.S. (College of the City of New York), Biochemistry, New York, N. Y.  
 Cole, Benjamin Theodore, B.S. (Duke University), Zoology, Durham, N. C.  
 Colvin, Ralph Whitmore, B.S. (Lawrence College), Clinical Psychology, Appleton, Wis.  
 Connor, Emma Gower, B.A. (Greensboro College), English, Biscoe, N. C.  
 Cooper, Mildred Jo, A.B. (University of Kentucky), History, Lexington, Ky.  
 Corley, Gerald Benjamin, A.B. (Central College), History, Fayette, Mo.  
 Cox, Gene Spracher, B.S., M.F. (Duke University), Forestry, Durham, N. C.  
 Crable, George Francis, B.S. (Geneva College); M.S. (University of Michigan), Physics, Ellwood City, Pa.  
 Craft, Stanley Irwin, B.S. (Richmond College), Education, Norfolk, Va.  
 Creamer, Boyce Harry, A.B. (Furman University); Th.B. (God's Bible College); A.M. (University of Texas), Sociology, Anderson, S. C.  
 Curry, Roy Watson, A.B. (Marshall College); A.M. (West Virginia University), History, Bayard, W. Va.  
 Davis, Marie, B.A. (State Teachers College, Farmville, Va.), History, Smithfield, Va.  
 Davis, Rodney Oliver, B.S. (Trinity College, Hartford), History, Hartford, Conn.  
 Daves, Mary Josephine, A.B. (Duke University), Sociology, Rome, Ga.  
 DeBouy, Katie Lou, B.A. (Texas State College for Women), History, Galveston, Texas.  
 Dedmond, Francis Berniel, A.B. (Catawba College); Th.M. (Southern Baptist Theological Seminary), English, Salisbury, N. C.  
 Deener, David Russell, A.B., M.A. (University of Pittsburgh), Political Science, Oakdale, Pa.  
 de la Vega, Gloria Augustina, B. in Arts & Science (Instituto Habana); D.S. (University of Havana), Romance Languages, Miami, Fla.

- Delgado, Nelle Smith, A.B. (Carson-Newman College), Spanish, Wake Forest, N. C.  
 Delhomme, George Arthur, Jr., B.A., M.A. (University of Toronto), English, Houston, Texas.  
 Donegan, Thomas Daniel, B.S. (Clemson College), History, New York, N. Y.  
 \*Dortsch, Hugh, Jr., B.S. (University of North Carolina), Zoology, Durham, N. C.  
 Drake, Justus Carlyle, B.A. (Wake Forest College); M.A. (Wake Forest College), English, Wake Forest, N. C.  
 Dratz, Arthur Frederick, A.B. (Duke University), Biochemistry, Oak Hill, N. Y.  
 Driskell, Martha Virginia, B.A. (Georgia State College for Women), Education, Columbus, Ga.  
 Dula, Lucile Noell, A.B. (Eastern Carolina Teachers College), Education, Hillsboro, N. C.  
 Dull, Frances Mae, B.A. (Flora Macdonald College), English, Cameron, N. C.  
 Dunn, William Lawrence, Jr., B.S. (Lynchburg College), Clinical Psychology, Richmond, Va.  
 Easterling, Henry Benjamin, B.S. (Mississippi Southern College); M.A. (University of Alabama), Education, Laurel, Miss.  
 Echental, Estelle Dean, B.A. (Brooklyn College), Zoology, Brooklyn, N. Y.  
 Eckert, Edward Arthur, A.B. (Brooklyn College); M.S. (Massachusetts Institute of Technology), Microbiology, Durham, N. C.  
 Edgerton, Jesse Wilbert, B.S. (Guilford College); M.A. (University of Florida), Clinical Psychology, Pikeville, N. C.  
 Edwards, Thelma C., A.B. (Guilford College), English, Durham, N. C.  
 Elmer, Robert Watson, A.B. (Amherst College); A.M. (Syracuse University), English, Durham, N. C.  
 Emma, Ronald David, B.B.A. (College of the City of New York), English, New York, N. Y.  
 Francisco, Noel, A.B., B.D., M.A. (Drake University), Sociology, Centerville, Iowa.  
 Friedman, Lorraine, B.A. (University of Arkansas), Microbiology, Hot Springs, Ark.  
 Friend, Fred Erwin, A.B., A.M. (Duke University), English, Nashville, Tenn.  
 Frostick, Frederick Charles, Jr., B.S. (Duke University), Chemistry, Maxton, N. C.  
 Fuchs, Joseph Paul, B.S. (United States Naval Academy), Education, Durham, N. C.  
 Gale, Glen Roy, A.B. (Duke University), Physiology, Mt. Croghan, S. C.  
 Gettys, Joseph Lyle, A.B. (Erskine College); M.Ed. (University of South Carolina), History, Rock Hill, S. C.  
 Gibbons, John Howard, B.S. (Randolph-Macon College), Physics, Harrisonburg, Va.  
 Gibbs, Norman Brantley, B.A. (Southwestern at Memphis); B.D. (Louisville Presbyterian Theological Seminary), Religion, Memphis, Tenn.  
 Girdner, John Byron, B.A., M.A. (University of Utah), Psychology, Salt Lake City, Utah.  
 Godfrey, Robert Kenneth, B.A. (Maryville College); M.A. (Harvard University), Botany, Raleigh, N. C.  
 Gordon, Harold Dunbar, B.S. (Wheaton College), Political Science, Bridgehampton, N. Y.  
 Griffin, Ernest Ray, B.S., M.S. (North Texas State College), Political Science, Denton, Texas.  
 Grigg, Womble Quay, Jr., A.B. (Duke University), English, Sylva, N. C.  
 Guilds, John Caldwell, Jr., A.B. (Wofford College); A.M. (Duke University), English, Columbia, S. C.  
 Hamilton, Thomas Theodore, A.B. (Central Missouri State College); A.M. (Duke University), History, Independence, Mo.  
 Hance, Charles Robert, B.S. (University of Illinois), Chemistry, Marengo, Ill.  
 Hancox, Jack Donald, B.A. (University of Tennessee), History, Maryville, Tenn.  
 Hannen, Lew Wallace, A.B. (Oberlin College); M.Ed. (Duke University), Education, Chester, W. Va.  
 Hardison, David Caleb, A.B. (Atlantic Christian College), Mathematics, Arapahoe, N. C.  
 Harris, Emma Frances, B.A. (Blue Mountain College), Education, Enid, Miss.  
 Harris, James Thurlow, Jr., B.S. (The Citadel); A.M. (Duke University), Chemistry, Spartanburg, S. C.  
 Harris, Robert Leigh, A.B., A.M. (University of Alabama), History, Tuscaloosa, Ala.  
 Hawk, David B., A.B. (Iowa State Teachers College), Sociology, Nacogdoches, Texas.  
 Haywood, Charles Foster, A.B. (Berea College), Economics, Tucson, Ariz.  
 Hazelwood, Dallas, B.S. (Furman University), Education, Thomason, Ga.  
 Heimberg, Murray, B.S. (Cornell University); M. Food S. (Cornell University), Biochemistry, Jackson Heights, N. Y.  
 Hilgartner, Margaret Wehr, B.A. (Byrn Mawr College), Zoology, Baltimore, Md.  
 Hill, Ralph F., A.B. (Duke University), Mathematics, Hendersonville, N. C.  
 Hirata, Arthur Atsunobu, B.S. (Duke University), Zoology, Norfolk, Va.  
 Holder, Nellie M., A.B. (Maryville College, Tennessee), Zoology, Andrews, N. C.  
 Hoover, Basil, A.B. (Marietta College), English, Harrisville, W. Va.  
 Hopkins, Adeline May, B.A. (Western Maryland College), Economics, Salisbury, Md.  
 Horton, Benjamin Tyler, B.A. (Carson-Newman College), History, Duffield, Va.  
 Howerton, Dorothy L., B.A. (Meredith College); M.Ed. (Duke University), Education, Durham, N. C.  
 Hudson, Virginia LaFrage, B.S. (Georgia State College for Women), History, Port Wentworth, Ga.  
 Hull, Alfred Newton, A.B. (Concord State College); A.M. (Duke University), Economics, Harrisburg, Pa.  
 Huneycutt, Charles Jerome, B.S. (Appalachian State Teachers College), Education, Durham, N. C.  
 Hunter, Sylvia Fishman, A.B. (Brooklyn College); M.S.P.H. (University of North Carolina), Biochemistry, Brooklyn, N. Y.  
 Hyland, Kervin Ellsworth, Jr., B.S. (Pennsylvania State University); M.S. (Tulane University), Zoology, York, Pa.

\* Special student.



- Irwin, Harry Penrose, Jr., B.A. (University of Delaware); M.Ed. (Duke University), Education, Durham, N. C.
- Ivie, Edith Jones, B.A. (Texas Christian University), Romance Languages, Durham, N. C.
- Jenness, David Montgomery, A.B. (Furman University), Romance Languages, Greenville, S. C.
- Jennings, Charles Warren, B. of Engineering (University of Toledo); M.S. (University of California), Chemistry, Washington, D. C.
- Jessee, Dora Jane, B.S. (Radford College), Education, Wise, Va.
- Jodrey, Louise Harriet, B.S. (Dalhousie University), Zoology, Northport, Nova Scotia.
- Johnson, Charles Minor, Jr., B.E. in Civil Engineering (Vanderbilt University), Physics, Nashville, Tenn.
- Johnson, Richard Stebbins, B.S. (Illinois Institute of Technology), Chemistry, Maywood, Ill.
- Jones, Martha Elizabeth, B.A. (Denison University), English, Parkersburg, W. Va.
- Kapchan, Jack Albert, B.S.S. (College of the City of New York), Psychology, New York, N. Y.
- \*Karmazin, Michael L., A.B. (Duke University), History, Philadelphia, Pa.
- Keirce, William Francis, B.M.E. (University of Louisville), English, Louisville, Ky.
- Kenion, Alonzo Williams, A.B., A.M. (Duke University), English, Hillsboro, N. C.
- Kepchar, John Howard, A.B. (Catawba College), Physiology, Windber, Pa.
- Keyser, Stanley Randolph, B.A. (Wake Forest College), History, Ottoman, Va.
- Kilberg, Edward Joseph, B.A. (Hofstra College), Economics, Amityville, N. Y.
- King, Doris Elizabeth, A.B. (Georgia State Woman's College); A.M. (Duke University), History, Cairo, Ga.
- King, James Winston, B.S. (Shippensburg State Teachers College), Education, Chambersburg, Pa.
- Kirtley, Anne (University of Kentucky), Education, Horse Cave, Ky.
- Kohn, Edward Maurice, B.S. (College of the City of New York), Chemistry, New York, N. Y.
- La Borde, Irene, B.A., M.A. (University of South Carolina), English, Columbia, S. C.
- Laise, Sarah Virginia, A.B. (Shepherd College), Education, Bunker Hill, W. Va.
- Lambert, Sarah Margaret, B.S. in Educ. (Georgia State College for Women), History, College Park, Ga.
- Lancaster, Forrest Wesley, B.S. (Purdue University), Physics, Raleigh, N. C.
- Layton, Frank L., B.S. (North Georgia College), Chemistry, Cartersville, Ga.
- Leder, Irwin Gordon, A.B. (Brooklyn College); M.S. (New York University), Biochemistry, Brooklyn, N. Y.
- Lind, Edward Louis, ScB. (Brown University); A.M. (Duke University), Chemistry, Whitestone, L. I., N. Y.
- Luck, Clarence Frederick, Jr., B.A. (University of Buffalo), Physics, Buffalo, N. Y.
- McArthur, John Bernard, B.S. in Ed. (Georgia Teachers College), Education, Savannah, Ga.
- McCain, Paul Moffatt, B.A. (Erskine College); A.M. (Duke University), History, Decatur, Ga.
- McCoury, Phillip D., B.A. (Reed College), Economics, Chicago, Ill.
- McCrary, Martha Penn, A.B. (Duke University), English, Lexington, N. C.
- McDermott, Robert Emmet, B.S.F., M.S. (Iowa State College), Botany, Maywood, Ill.
- MacIntosh, Fred Henry, A.B. (University of South Carolina); A.M. (Duke University), English, Clemson, S. C.
- McKinney, Gordon R., A.B. (DePauw University); M.S. (Notre Dame University), Physiology, Indianapolis, Ind.
- MacKorell, Mary Bowers, A.B. (Randolph-Macon Woman's College), Religion, Charlotte, N. C.
- McLarty, Colin Slater, B.S.M.E. (Duke University), Economics, Swarthmore, Pa.
- McLaurin, Wayne, B.S. (Memphis State College), English, Memphis, Tenn.
- McMahon, Frances Elizabeth, A.B. (Harris Teachers College), Education, St. Louis, Mo.
- McNurden, Lewis J., B.A., M.A. (Drake University), Sociology, Perry, Iowa.
- Maddox, Mildred Mitchell, A.B. (Duke University), English, Snow Hill, N. C.
- Maldonado-Clark, Nelly, B.S. (University of Puerto Rico), Chemistry, Santurce, Puerto Rico.
- Malone, E. Thomas, B.S. (Alabama Polytechnic Institute), Education, Camp Hill, Ala.
- Man, Eugene Herbert, A.B. (Oberlin College), Chemistry, Slarks Green, Pa.
- Manlove, George Kendall, B.A., M.A. (Oberlin College), English, Chagrin Falls, Ohio.
- Manly, Jethro Oates, B.S. (College of William and Mary), Botany, Durham, N. C.
- Masters, Leon Raymond, B.S. (The Citadel), Economics, Charleston, S. C.
- Mesones, Jean Nancy, B.A. (University of Buffalo), Psychology, Salem, Va.
- Miller, Vera May, B.A. (Evansville College), History, Evansville, Ind.
- Mitchell, Lester M., B.A. (Otterbein College); M.Ed. (Duke University), Education, Johnstown, Pa.
- Mockler, Richard Calvin, B.S. (Northwestern University), Physics, Wilmette, Ill.
- Monfort, Robert John, A.B. (Duke University), Education, Durham, N. C.
- Montgomery, Eddith Ruth, A.B. (Georgia State College for Women), Education, Kissimmee, Fla.
- Mullen, John C., B.A. (Wayne University); M.S. (Alabama Polytechnic Institute), English, Durham, N. C.
- Murray, Edward James, A.B. (Columbia University), Psychology, Brooklyn, N. Y.
- Nelson, Herman Berg, A.B. (Duke University), Education, Durham, N. C.
- Nelson, William Ralph, A.B. (University of Miami); A.M. (University of Texas), English, Miami, Fla.
- Nichols, Lawrence Richard, B.A. (Wake Forest College), History, Winston-Salem, N. C.
- Nielsen, Kai Edward, B.A. (University of North Carolina), Philosophy, Chapel Hill, N. C.
- Noll, Robert Roscoe, B.S. (Pennsylvania State College), Education, Charlotte, N. C.

\* Special student.

- Oliver, George B., B.A. (Randolph-Macon College); A.M. (Duke University), History, Doswell, Va.
- Parker, Clarence Poe, A.B., M.A. (Wofford College), Education, Mathiston, Miss.
- Parsons, Oscar Albert, A.B., M.A. (Temple University), Psychology, Mt. Ephraim, N. J.
- Penninger, Frieda Elaine, A.B. (Woman's College, U. N. C.), English, Marion, N. C.
- Perrin, Edwin Noel, B.A. (Williams College), English, Pelham Manor, N. Y.
- Pfeiffer, Mary Margaret, B.S. (Florida State College for Women); M.S. (University of Michigan), Mathematics, Pensacola, Fla.
- Pollock, Theodore Marvin, B.A. (Brooklyn College), English, Brooklyn, N. Y.
- Pope, Beryl Weyms, B.S. (Georgia State College for Women), Mathematics, Barwick, Ga.
- Porter, Hardin Kibbee, B.S. (University of Texas); M.S. (Georgia School of Technology), Chemistry, Philadelphia, Pa.
- Powell, William Allan, B.S. (Wake Forest College), Chemistry, Wallace, N. C.
- Powell, Woodrow Wilson, B.S. (South Georgia Teachers College); A.M. (Duke University), English, Register, Ga.
- Powers, Walter Dean, Jr., A.B. (Presbyterian College); LL.B. (Atlanta Law School); M.Ed. (Duke University), Education, Woodstock, Ga.
- Puterbaugh, Walter Henry, Jr., A.B. (Duke University), Chemistry, Johnstown, Pa.
- Raebeck, Charles Arlington, A.B. (Duke University), Education, Durham, N. C.
- Ratliff, Charles Edward, Jr., B.S. (Davidson College), Economics, Morven, N. C.
- Reveley, Walter Taylor, A.B. (Hampden-Sydney College); B.D. (Union Theological Seminary), Religion, Durham, N. C.
- Rickey, Mary Ellen, B.A. (Louisiana State University), English, Baton Rouge, La.
- Rivers, Dorris Wilmer, B.S. (Mississippi Southern College); M.Ed. (Duke University), Sociology, State College, Miss.
- Rosoff, Morton, B.A., M.A. (Brooklyn College), Chemistry, Brooklyn, N. Y.
- Ross, William Dee, Jr., A.B. (Millsaps College); A.M. (Duke University), Economics, Crystal Springs, Miss.
- Ruff, Florence Elmira, B.S. (Shippensburg State Teachers College), Education, La Plata, Md.
- Rylander, Gustave William, B.A. (Allegheny College), History, Pittsburgh, Pa.
- Sample, Kathleen, A.B. (John B. Stetson University), Botany, Daytona Beach, Fla.
- Schaller, Howard Graham, A.B. (Duke University); M.A. (Northwestern University), Economics, Auburn, Ala.
- Schmale, Marion I., B.S. (Ed. Rider College), Spanish, Moosic, Pa.
- Schramm, Robert Johnson, Jr., B.A. (Hiram College); A.M. (Duke University), Botany, Hiram, Ohio.
- Scott, Harley Augustus, Jr., A.B. (Duke University), Psychology, Kannapolis, N. C.
- Seibert, Julien Carl, A.B. (Franklin College), Sociology, Queens Village, N. Y.
- Seyler, William Charles, A.B., M.A. (University of Pittsburgh), Political Science, Pittsburgh, Pa.
- Sharp, Henry, Jr., B.E. (Vanderbilt University); A.M. (Duke University), Mathematics, Nashville, Tenn.
- Shepard, Maurice Charles, B.S., M.S. (University of Wisconsin), Bacteriology, Durham, N. C.
- Siddall, Thomas Henry, III, A.B. (University of North Carolina); M.S. (University of Chicago), Chemistry, Sumter, S. C.
- Silva, Joseph Andrew, B.S. (Northeastern University); A.M. (Duke University), Mathematics, Lexington, Mass.
- Simpson, Lillian Norris, B.A. (Furman University), Education, Greenville, S. C.
- Smith, Mary Brent, B.S. (Georgia State College for Women), Education, Knoxville, Ga.
- Smith, LeRoy Walter, B.A. (The American University); M.A. (George Washington University), English, Arlington, Va.
- Smyre, Melford A., A.B. (Duke University), Sociology, Newton, N. C.
- Southern, J. Albert, A.B. (Duke University), Education, Madison, N. C.
- Spencer, Stephen Marion, Jr., B.S. (Wake Forest College); A.M. (Duke University), Mathematics, Wilmington, N. C.
- Spigner, James M., A.B. (The Citadel); LL.B. (University of South Carolina), Political Science, Columbia, S. C.
- Sprague, Barbara P., B.S. (University of Massachusetts), Mathematics, Bedford, Mass.
- Stalzer, Robert Frederick, B.S. (Kent State University); A.M. (Duke University), Chemistry, Cuyahoga Falls, Ohio.
- Stanback, Thomas Melville, Jr., B.S. (University of North Carolina); M.B.A. (Harvard University), Economics, Chapel Hill, N. C.
- Steel, James Richard, Jr., A.B. (University of Pennsylvania), Botany, Philadelphia, Pa.
- Steele, Arthur Robert, A.B. (University of California); M.A. (University of New Mexico), History, Oakland, Calif.
- Stockdale, Harry Foster, B.S. (Slippery Rock State Teachers College), History, Emporium, Pa.
- Story, Elwyn Glenn, A.B. (George Washington University), Psychology, Paris, Tenn.
- Strain, Edward Richard, Jr., A.B. (Butler University), Psychology, Indianapolis, Ind.
- Tarilton, William Samuel, B.A., M.A. (Wake Forest College), History, Marshallville, N. C.
- Tefft, Edna Marian, B.S. (Ohio University), Education, Norwood, Ohio.
- Thompson, Virginia Mary, A.B. (University of Alabama), History, Mobile, Ala.
- Thumm, Byron Ashley, B.S. (Morris Harvey College), Chemistry, Charleston, W. Va.
- Tufts, Ernest Woodrow, B.S. (New River State College), Education, Deepwater, W. Va.
- Tumblin, John Addison, A.B. (Wake Forest College), Sociology, Newport News, Va.
- Tyre, Robert Harold, B.S. (Georgia Teachers College), Education, Odum, Ga.
- Van Fossen, Richard Waight, A.B. (Duke University), English, Washington, D. C.
- Vogel, Ralph Arnold, B.A. (Wagner College); M.A. (University of Buffalo), Bacteriology, Buffalo, N. Y.



Walter, Waldemar Melchert, A.B. (Harvard University), Zoology, Cambridge, Mass.  
 Warlick, Raymond Aubrey, Jr., A.B. (High Point College), History, Lawndale, N. C.  
 Webb, John Maurice, A.B. (Duke University); A.M. (Yale University), History, Durham, N. C.  
 Webb, Margaret Juanita, B.S. (Radford College), Education, Anawalt, W. Va.  
 Wenger, Karl Frederick, B.S. (University of Maine); M.F. (Duke University), Forestry, Buckingham, Va.  
 Wishner, Eileen A., A.B. (Shepherd College), Education, Sharpsburg, Md.  
 Wiebe, Herman Henry, B.A. (Goshen College); M.A. (State University of Iowa), Botany, Newton, Kan.  
 Wilkerson, Albert Ernest, Jr., A.B. (Duke University), Sociology, Durham, N. C.  
 Wilkinson, Thomas Oberson, A.B. (University of North Carolina), Sociology, Jacksonville, Fla.  
 Williams, Joel Quitman, B.S. (Centenary College); M.S. (Georgia Institute of Technology), Physics, Atlanta, Ga.  
 Willis, Hulon Sims, A.B. (Piedmont College); M.A. (University of California), English, Norman Park, Ga.  
 Wishart, Lutrelle Angel, A.B. (Randolph-Macon College), English, Asheville, N. C.  
 Wishner, Raymond P., B.S. (Northwestern University), Economics, Chicago, Ill.  
 Wood, Paul Royal, A.B. (Birmingham-Southern College), Romance Languages, Birmingham, Ala.  
 Woodard, Marvin Lee, B.A. (Atlantic Christian College), Education, Wilson, N. C.  
 Young, James Howard, B.A. (University of Virginia), Mathematics, Norfolk, Va.  
 Zauder, Howard L., A.B. (University of Vermont), Physiology, Kew Garden Hills, L. I., N. Y.

## *The Divinity School*

Allred, Garland Howard (A.B., Guilford College), Greensboro, N. C.  
 Alspaugh, Carlton Gaither, Jr. (A.B., High Point College), Winston-Salem, N. C.  
 Anderson, James Harold (B.A., Wake Forest College), Mars Hill, N. C.  
 Andrews, James David (B.S., University of North Carolina), Goldsboro, N. C.  
 Atkins, John Payne (B.A., Millsaps College), Columbus, Miss.  
 Austin, Harold Covington (A.B., High Point College), High Point, N. C.  
 Bailey, Daniel Edwin (A.B., Catawba College), Albemarle, N. C.  
 Ballentine, Wyman Wayne (B.S., Clemson A. & M. College), Blythewood, S. C.  
 Barefield, Robert Stanhope (B.S., Alabama Polytechnic Institute), Aberdeen, N. C.  
 Barlow, Hubert Lee (B.A., Millsaps College), Wesson, Miss.  
 Bass, Walton Needham (A.B., Wofford College), Goldsboro, N. C.  
 Bauer, Eugene Joseph (A.B., Duke University), Chicago, Ill.  
 Beane, Kenneth Eugene (A.B., High Point College), Siler City, N. C.  
 Bedenbaugh, Kenneth Wilson (B.S., Wofford College), Chesterfield, S. C.  
 Bennett, Erman Fay (B.S., College of the Ozarks), Clarksville, Ark.  
 Bennett, Harold Clark (B.A., Wake Forest College), Asheville, N. C.  
 Bennett, William Leffis (B.A., Wake Forest College; A.M., Duke University), Shallotte, N. C.  
 Bigelow, Ralph Jordan (B.S., University of South Carolina), North Charleston, S. C.  
 Bizzell, Henry Arthur, Jr. (A.B., Duke University), Newton Grove, N. C.  
 Boggs, Clyde Stewart (A.B., Kentucky Wesleyan; B.D., Duke Divinity School), Durham, N. C.  
 Boulton, Edwin Charles (B.A., William Jewell College), St. Joseph, Mo.  
 Brogan, Wesley Gamble (A.B., Dickinson College), Wilmington, Del.  
 Brown, Chester Darrol (A.B., High Point College), High Point, N. C.  
 Brown, James Collins Parker (A.B., High Point College), Lasker, N. C.  
 Burks, Peter Talmadge (A.B., University of North Carolina), Chapel Hill, N. C.  
 Bush, Warren Thomas (B.S., Wake Forest College), Roanoke Rapids, N. C.  
 Cahow, Clark R. (A.B., Duke University), Durham, N. C.  
 Caldwell, Ralph Martin (B.S., Davidson College), Spartanburg, S. C.  
 Carpenter, James Anderson (A.B., Wofford College), Shelby, N. C.  
 Carraway, Ray Edward (A.B., Atlantic Christian College), Snow Hill, N. C.  
 Casey, Joseph Howard (A.B., Harvard University), Lumberport, West Va.  
 Casper, George W. (A.B., Heidelberg College), Canton, Ohio.  
 Caudill, Clarence Jack (A.B., University of Tennessee), Millers Creek, N. C.  
 Chamblee, Arthur L., Jr. (A.B., Piedmont College), Winston-Salem, N. C.  
 Chang, Timothy (B.S., Fukien Christian University), Fukien, China.  
 Charlton, David Wayland, Jr. (B.A., Randolph-Macon College), Manteo, N. C.  
 Christenberry, Daniel Keener, Jr. (B.S., Alabama Polytechnic Institute), Stewart, Ala.  
 Clarke, Robert Gray (A.B., Miami University), Dayton, Ohio.  
 Clary, Carl Douglas (A.B., Wofford College), Gaffney, S. C.  
 Copeland, Isaac Mathias, Jr. (A.B., Duke University), Norfolk, Va.  
 Crawley, Robert Pinckney (A.B., University of North Carolina), Statesville, N. C.  
 Crook, James Rutland, Jr. (A.B., Duke University), Jacksonville, Fla.  
 Currin, Billie Ruth (A.B., Woman's College of the University of North Carolina; M.A., Columbia University), Angier, N. C.  
 Daugherty, Luby Guilford (B.A., Wake Forest College), New Bern, N. C.  
 Davies, Merlin Cleon (A.B., Morningside College), Sioux City, Iowa.  
 Davis, Herman Fred (A.B., Wofford College), Carthage, N. C.  
 Dawsey, Cyrus Bassett, Jr. (A.B., Wofford College), Madison, Fla.  
 Dennis, Billy Vernon (B.A., Hendrix College), Lexa, Ark.

- Desrosiers, Norman Alfred (A.B., Duke University), Butner, N. C.  
 Dickson, Clarence Harley, Jr. (B.S., Davidson College), Asheville, N. C.  
 Dorr, Robert Warren (A.B., University of Maryland), Mt. Ranier, Md.  
 East, Clifford Lyle, Jr. (B.A., Randolph-Macon College), Richmond, Va.  
 Edwards, Otis Carl, Jr. (A.B., Centenary College), Shreveport, La.  
 Elgert, Charles Roger (A.B., Johns Hopkins University), Baltimore, Md.  
 Ellington, James Richard (A.B., Catawba College), Belmont, N. C.  
 Enloe, Martha Elkanor (B.S., Montreat College), Andrews, N. C.  
 Fernyhough, William Todd (A.B., Elon College), Reidsville, N. C.  
 Ferris, Fred I. E. (A.B., Duke University), Seaside, N. Y.  
 Fields, Clyde Lee (A.B., Elon College), Reidsville, N. C.  
 Fike, Earle William (A.B., Bridgewater College), Circleville, W. Va.  
 Fitzgerald, Bernard Ray (A.B., Wofford College), Charlotte, N. C.  
 Fogleman, Clarence Millard, Jr. (A.B., Kansas Wesleyan University), Burlington, N. C.  
 Ford, Jesse Emerson, Jr. (A.B., Wofford College), Durham, N. C.  
 Foster, Robert A. (A.B., Johns Hopkins University), Memphis, Tenn.  
 Fowkes, Ralph Eugene, Jr. (A.B., Marshall College), Huntington, W. Va.  
 France, Carl Gallen (A.B., Bethany College), Blackstone, Va.  
 Gardner, Robert Granville (A.B., Mercer University), Durham, N. C.  
 Garrison, John W. (A.B., Asbury College), Raleigh, N. C.  
 Gatlin, Curtis Robert (B.S., Newberry College), Newberry, S. C.  
 Gibbs, James Samuel, Jr. (A.B., Wofford College), Spindale, N. C.  
 Gibson, Earl K. (A.B., Wofford College), Charlotte, N. C.  
 Gibson, Robert Stansill (A.B., Duke University), Rockingham, N. C.  
 Glasgow, Carl Edward (B.S., Cornell University; M.S., University of Rochester), Rochester, N. Y.  
 Golden, Jacob Bowles (A.B., Lenoir-Rhyne College), Hickory, N. C.  
 Groves, David Clayton (A.B., Florida Southern College), Jacksonville, Fla.  
 Hailey, James Russell (B.A., Elon College), Leaksville, N. C.  
 Hall, James Thomas (A.B., Duke University), High Point, N. C.  
 Hammersla, Edgar Ward (A.B., Western Maryland College), Martinsburg, W. Va.  
 Hardeaman, Howard DeFrance (A.B., Central College), Pacific, Mo.  
 Harmon, Alonzo Lincoln (A.B., Duke University), Bluefield, W. Va.  
 Harris, Clinton Ross (A.B., Duke University), Durham, N. C.  
 Hastings, Arthur Henry (B.A., Washington College), Salisbury, Md.  
 Henley, George Gray (A.B., Hampden-Sydney College), King George, Va.  
 Higgins, James Silvester (A.B., High Point College), Guilford College, N. C.  
 Hill, Fred Adam (A.B., Catawba College), Salisbury, N. C.  
 Hinrichs, Conley Kent (B.A., Nebraska Wesleyan University), Hildreth, Neb.  
 Holler, Adlai Cornwell, Jr. (A.B., Wofford College), Myrtle Beach, S. C.  
 Horn, Kenneth Arthur (A.B., Wofford College), Upper Darby, Pa.  
 Huggins, Ernest, Jr. (A.B., The Citadel), Johnsonville, S. C.  
 Hutchinson, Louise Conrad (B.A., Queens College), Charlotte, N. C.  
 Hutchinson, Orion Neely, Jr. (A.B., Davidson College), Charlotte, N. C.  
 Jackson, Joe Hoyt (B.A., Centenary College), Shreveport, La.  
 Johnson, E. Weldon (B.A., Wake Forest College), Fayetteville, N. C.  
 Jordan, Robert Harry (A.B., High Point College), Siler City, N. C.  
 Jordan, Virginia (A.B., Morris Harvey College), Charleston, W. Va.  
 Joyce, Johnie Leroy (A.B., Duke University; M.A., University of North Carolina), Burlington, N. C.  
 Kincaid, John J. Pershing (A.B., High Point College), Seagrove, N. C.  
 Kinlaw, Dennis Franklin (A.B., Asbury College), Faison, N. C.  
 Kirby, Wallace Hines (B.S., University of North Carolina), Roxboro, N. C.  
 Kirk, Barbara Jean (B.S., East Tennessee State College), Ooltewah, Tenn.  
 Knight, Richard Orosz (A.B., Morris Harvey College), Vero Beach, Fla.  
 Lackey, John Robert (B.A., Elon College), Greensboro, N. C.  
 Laughlin, William Wesley, Jr. (A.B., West Virginia Wesleyan College), Mannington, W. Va.  
 Leatherman, Harold Franklin (A.B., Lenoir-Rhyne College), Vale, N. C.  
 Lee, Robert Edward (B.A., Randolph-Macon College), Richmond, Va.  
 Lewis, Gene Elton (B.A., Atlantic Christian College), Goldsboro, N. C.  
 Lewis, Jimmy Anfosso (A.B., Southwestern University), Luling, Texas.  
 Lock, James Sidney (B.S., Alabama Polytechnic Institute), Montgomery, Ala.  
 Lockhart, Joyce Gwendolyn (A.B., Berea College), Prairie Grove, Ark.  
 Lovelace, Marc Hoyle (A.B., High Point College; Th.M., Th.D., Southern Baptist Theological Seminary), Wake Forest, N. C.  
 Luessen, Ezra Assel (B.A., Ohio Wesleyan University), Cincinnati, Ohio.  
 McClure, Bruce Eugene (B.S., Indiana University), Princeton, Ind.  
 McCulley, Glenn Reeves (A.B., High Point College), Lenoir, N. C.  
 McKee, Robert F. (A.B., Ursinus College), Eustis, Fla.  
 McClean, Robert A. (A.B., King College), Buies Creek, N. C.  
 Mallard, William, Jr. (B.A., Randolph-Macon College), Richmond, Va.  
 Mallary, Martha Bayne (A.B., University of North Carolina), Macon, Ga.  
 Maness, Charles McKinley, Jr. (A.B., University of North Carolina), Durham, N. C.  
 Mashburn, Dwight Winfred (A.B., High Point College), Highfalls, N. C.  
 Megill, George Caskey (A.B., Tulsa University), Seminole, Okla.  
 Mitchell, Frank Joseph (B.S., Alabama Polytechnic Institute), Fairfield, Ala.  
 Moore, Joseph Charles, Jr. (A.B., Dickinson College), Mill Hall, Pa.  
 Moore, Kenneth Robbins (A.B., High Point College), Charlotte, N. C.  
 Moore, Robert Freeman (A.B., Shepherd College), Martinsburg, W. Va.  
 Moose, J. L. Walter (B.A., Wake Forest College; M.A., Wake Forest College), Statesville, N. C.

Montfort, Russell Thompson (A.B., Kentucky Wesleyan College), Crestwood, Ky.  
 Nagel, Herman Kyle (A.B., Southwestern University), Edna, Texas.  
 Nees, Forrest Glenn (A.B., Ohio Wesleyan University), Akron, Ohio.  
 Norton, Zane Grey (A.B., Duke University), Raeford, N. C.  
 Owen, John Malloy, III (B.S., Davidson College), Fayetteville, N. C.  
 Owens, Charles Edward (B.S., Texas A. & M.), Brookston, Texas.  
 Park, Marvin Ross, Jr. (A.B., University of Alabama), Ralph, Ala.  
 Parker, Archie R., Jr. (B.A., Millsaps College), Columbus, Miss.  
 Payne, Don Aubrey (A.B., High Point College), High Point, N. C.  
 Peoples, Doris (B.A., Wake Forest College), Gastonia, N. C.  
 Pemberton, John, III (A.B., Princeton University), Cape May, N. J.  
 Peters, Gerlaise Francis (A.B., Ohio Wesleyan University), Ashville, Ohio.  
 Pledger, Bennie Edward (B.A., Wake Forest College), Wake Forest, N. C.  
 Polley, Max Eugene (A.B., Albion College), Niles, Mich.  
 Potts, Reginald Harrell (A.B., Lake Forest College), Wilmette, Ill.  
 Pruyn, Harold Andrew (B.A., Juniata College; M.S., Pennsylvania State College), Sidney, N. Y.  
 Putnam, Ray Clayton (A.B., High Point College), Greensboro, N. C.  
 Pyatt, Clyde Dwight (A.B., Duke University), Balfour, N. C.  
 Ramsey, Vernon Jerome (A.B., Catawba College), Salisbury, N. C.  
 Randolph, Charles Wesley (A.B., Elon College), Gibsonville, N. C.  
 Raper, William Burkette (A.B., Duke University), Middlesex, N. C.  
 Regan, James Robert, Jr. (A.B., Duke University), Pine Bluff, N. C.  
 Rich, William Alfred (B.A., Elon College), Graham, N. C.  
 Richardson, Austin Harper (B.S., University of Minnesota), Austin, Minn.  
 Richardson, John Earl (A.B., High Point College), Eagle Springs, N. C.  
 Rush, James Wallace (B.A., Randolph-Macon College), McGaheysville, Va.  
 Schores, Daniel Mortimer, Jr. (A.B., Central College), Overland, Mo.  
 Selstad, Robert Arney (B.S., University of Houston), Houston, Texas.  
 Sexton, Kenneth Bryan (B.S., North Carolina State College), Enfield, N. C.  
 Sharpe, Lauren R. (B.A., Wake Forest College), Kenansville, N. C.  
 Shepherd, Douglas Nelson (A.B., Duke University), Huntington, W. Va.  
 Sherbert, Lloyd Leslie (B.B.A., University of Houston), Houston, Texas.  
 Shoaf, Early Clifford (A.B., High Point College), High Point, N. C.  
 Smith, Frank Ira (B.A., Syracuse University), Vernon, N. Y.  
 Smith, William Poole (B.A., Wake Forest College), Haw River, N. C.  
 Smotherman, Ernest Hermon (B.S., Middle Tennessee State Teacher's College), Chapel Hill, Tenn.  
 Spears, Jimmie Wray (A.B., Morris Harvey College), Charleston, W. Va.  
 Squires, Donal Morley (A.B., Fairmont State College), Fairmont, W. Va.  
 Statler, Earl Gladish (A.B., Southeast Missouri State College), Millersville, Mo.  
 Steele, Thomas Fant, Jr. (A.B., Wofford College), Rock Hill, N. C.  
 Swain, David Lowry (A.B., Duke University), Asheville, N. C.  
 Taylor, Eben (A.B., Wofford College), Charleston, S. C.  
 Taylor, Kenneth Merwin (A.B., Florida Southern College), Miami, Fla.  
 Thompson, George William (A.B., High Point College), Mebane, N. C.  
 Tucker, Charles Clyde, Jr. (B.A., Randolph-Macon College), Annandale, Va.  
 Turner, Clarence Ambrose, III (B.S., Virginia Polytechnic Institute), Richmond, Va.  
 Turner, Sterling Deloy, Jr. (B.S., East Tennessee State College), Spring City, Tenn.  
 Tyson, George Hart (A.B., Duke University), Durham, N. C.  
 Tyson, Joseph Blake (A.B., Duke University), Charlotte, N. C.  
 Tyson, Marvin Dewey (A.B., Atlantic Christian College), Rocky Mount, N. C.  
 Tyson, Tommy (A.B., Duke University), Durham, N. C.  
 Waldrop, John Herbert, Jr. (A.B., High Point College), Greenville, N. C.  
 Wallace, Carl Edison (A.B., Elon College), Greensboro, N. C.  
 Walton, Charles Reginald (B.A., Roanoke College), South Boston, Va.  
 Walton, William Carlisle (A.B., Maryville College), Apex, N. C.  
 Warner, Joseph M. G. (A.B., High Point College), Greensboro, N. C.  
 Warren, George B. (A.B., Duke University), Orlando, Fla.  
 Wentz, Walter Allen, Jr. (A.B., Elon College), Rockingham, N. C.  
 Whicker, Grady H. (A.B., High Point College), Jacksonville, N. C.  
 Wicker, Max William (A.B., Duke University), Aberdeen, N. C.  
 Widenhouse, Milton Gordon (A.B., Catawba College), Concord, N. C.  
 Wiggers, Charles Campbell (B.A., Millsaps College), Indianola, Miss.  
 Wiggers, Mary LeGrande (B.A., Millsaps College), Jackson, Miss.  
 Wilkerson, Albert Ernest, Jr. (A.B., Duke University), Durham, N. C.  
 Williams, Clarence Daniel (A.B., Davidson College), Kingstree, S. C.  
 Williams, Jack (B.A., Millsaps College), Lexington, Miss.  
 Wilson, Alvin Austin (A.B., University of North Carolina), Newton, N. C.  
 Wilson, Kelly Johnson (A.B., Duke University), Carthage, Tenn.  
 Wilson, William Earl, Jr. (B.A., Randolph-Macon College), Norfolk, Va.  
 Winegeart, Jack Stroud (A.B., Centenary College), Shreveport, La.  
 Winfree, William A. (B.A., Augustana College), Portsmouth, Va.  
 Woolley, John Rush (A.B., University of North Carolina), Wagram, N. C.  
 Workman, Miles Marion (A.B., High Point College), Thomasville, N. C.  
 Wyand, Fred B., Jr. (A.B., Marshall College), Hinton, W. Va.  
 Young, Joe Bryant (B.S., University of Houston), Houston, Texas.  
 Young, Loren D. (A.B., Duke University), Charleston, W. Va.  
 Young, Russell Lowell, Jr. (A.B., Duke University), North Wilkesboro, N. C.  
 Youngblood, William Lee (B.A., Millsaps College), Wesson, Miss.

STUDENTS ENROLLED IN THE DEPARTMENT OF RELIGION OF THE  
GRADUATE SCHOOL OF ARTS AND SCIENCES 1950-1951

- Allen, Ray Maxwell (B.A., Southwestern at Memphis; B.D., Duke Divinity School), Durham, N. C.  
 Bailey, Ruby M. (B.A., University of Chattanooga; M.R.E., Duke Divinity School), Durham, N. C.  
 Bellamy, Virginia Nelle (B.S., East Tennessee State College; M.A., Duke University), Powell, Tenn.  
 Carlton, John William (B.A., Baylor University; B.D., Duke Divinity School), Corpus Christi, Texas.  
 Carroll, Kenneth Lane (A.B., Duke University; B.D., Duke Divinity School), Easton, Md.  
 Chamberlain, John Victor (A.B., Florida Southern College), Colwyn, Pa.  
 Daniels, Boyd Lee (A.B., College of Wooster; B.D., McCormick Theological Seminary), Sandusky, Ohio.  
 Gibbs, Norman Brantley (A.B., Southwestern at Memphis; B.D., Louisville Presbyterian Theological Seminary), Memphis, Tenn.  
 Hamilton, Harold P. (A.B., High Point College; B.D., Duke Divinity School), Lexington, N. C.  
 Hamrick, Emmett Willard (A.B., University of North Carolina), Shelby, N. C.  
 Harris, Carl Vernon (A.B., Wake Forest College; B.D., Yale Divinity School; S.T.M., Yale Divinity School), Morganton, N. C.  
 Helmbold, F. Wilbur (B.A., Howard College), Springville, Ala.  
 Highfill, William Lawrence (A.B., Wake Forest College; B.D., Southern Baptist Theological Seminary), Winston-Salem, N. C.  
 Hosea, Addison (A.B., Atlantic Christian College; B.D., University of the South), Clinton, N. C.  
 Kidder, Maurice Arthur (A.B., University of New Hampshire; S.T.B., Boston University School of Theology; S.T.M., Yale Divinity School), Chapel Hill, N. C.  
 Moore, Jack Warren (A.B., Olivet Nazarene College; B.D., Duke Divinity School), Durham, N. C.  
 Moudy, James M. (B.A., Texas Christian University; B.D., Texas Christian University), College Station, Texas.  
 Pannill, Harry Burnell (A.B., Randolph-Macon College; B.D., Duke Divinity School), Ashland, Va.  
 Perkins, James Crosswell (B.A., Princeton University; B.D., Oberlin School of Theology; Th.M., Oberlin School of Theology), San Antonio, Texas.  
 Reveley, Walter Taylor (A.B., Hampden-Sydney College; B.D., Union Theological Seminary [Richmond]), Durham, N. C.  
 Score, John N. R. (A.B., Southwestern University; B.D., Garrett Biblical Institute), Georgetown, Texas.  
 Smith, Kenneth Lee (A.B., University of Richmond; B.D., Crozer Theological Seminary), Exmore, Va.  
 Suggs, M. Jack (A.B., University of Texas; B.D., Texas Christian University), Glade-water, Texas.  
 Taylor, George Aiken (A.B., Presbyterian College; B.D., Columbia Theological Seminary), Smyrna, Ga.  
 Waggoner, Brooks Milton (A.B., University of Arkansas; B.D., Duke Divinity School), Stilwell, Okla.  
 Wilcox, William George (B.A., Stanford University; M.A., Berkeley Baptist Divinity School; B.D., Union Theological Seminary [New York]), Folsom, Calif.  
 Wiles, Charles Preston (A.B., Washington College; B.D., Virginia Theological Seminary; M.A., Duke University), Brunswick, Md.  
 Workman, George Arthur (A.B., Hobart College; B.D., Virginia Theological Seminary), Durham, N. C.

*School of Law*

## FIRST YEAR

- Biloon, Harold Levin (Harvard University), Norwich, Conn.  
 Brackney, William Austin (Duke University), Toledo, Ohio.  
 Brooks, Val Carlton (Duke University), Wilson, N. C.  
 Campbell, Robert Duncan (Duke University), Pelham Manor, N. Y.  
 Chadwick, Harry Roberts, Jr. (Duke University), Smyrna, N. C.  
 Chambers, Jack Horne (Duke University), Clothier, W. Va.  
 Claughton, Edward Napoleon, Jr. (Duke University), Miami, Fla.  
 Corley, Donald George (Duke University), Jackson, Mich.  
 Cromartie, Martin Luther, Jr. (Duke University), Tarboro, N. C.  
 Davis, Gerald E. (Pennsylvania State College), Altoona, Pa.  
 Dawson, John Burnette, Jr. (Duke University), Locust Valley, L. I., N. Y.  
 Dickens, Wade Hampton, Jr. (Duke University), Scotland Neck, N. C.  
 Elf, Robert Duane (University of North Carolina), Jamestown, N. Y.  
 Farrow, Thomas Hunter (Virginia Polytechnic Institute), New Market, Va.  
 Fletcher, Westwood Hugh, Jr. (Graduate Institute of International Studies, Geneva, Switzerland), Bradenton, Fla.  
 Frisch, Robert Myron (Rutgers University), New Brunswick, N. J.



Galifianakis, Nick (Duke University), Durham, N. C.  
 George, Harris James (Duke University), Towson, Md.  
 Gwyn, Julius Johnston (Duke University), Reidsville, N. C.  
 Hagel, Harry (University of Connecticut), Cromwell, Conn.  
 Hubbard, Robert Carl (Duke University), Lancaster, S. C.  
 Hudspeth, George Lee (Texas Christian University), Yackinville, N. C.  
 Irwin, William Paul (Duke University), Pittsburgh, Pa.  
 Isley, Hugh Galloway, Jr. (Duke University), Raleigh, N. C.  
 Kauffman, James Valentine (Franklin & Marshall College), Pittsburgh, Pa.  
 Kellam, Floyd Eaton, Jr. (Duke University), Princess Anne, Va.  
 Kirby, John Randolph (Presbyterian College), Charlotte, N. C.  
 Kistler, David Reeves (Duke University), Creedmoor, N. C.  
 McEnteer, Frank Duff (Marietta College), DuBois, Pa.  
 May, Cecil Dalton (Duke University), New Bern, N. C.  
 Mousmoules, John Andrew (Duke University), Durham, N. C.  
 Nunn, Delmas Coleman, Jr. (Duke University), Atlanta, Ga.  
 Orzano, Joseph Ernest, Jr. (Duke University), Baldwin, N. Y.  
 Piglowski, Alphonse Aloysius (Duke University), Depew, N. Y.  
 Renfrow, Robert Perry (Duke University), High Point, N. C.  
 Shaw, John Daniel, Jr. (Duke University), Sistrerville, W. Va.  
 Shuford, William Albert (Duke University), Thomasville, N. C.  
 Siems, Chester Peter, Jr. (Trinity College (Connecticut)), Southampton, N. Y.  
 Smith, Calvin Earl (Franklin & Marshall College), Hamburg, Pa.  
 Smith, Franklin Calton, Jr. (Duke University), Charlotte, N. C.  
 Smith, James Donald (Western Reserve University), Omaha, Neb.  
 Smith, Lee Creedy (Duke University), Raleigh, N. C.  
 Stipe, Robert Edwin (Duke University), Easton, Pa.  
 Sulzer, Mrs. Elizabeth Derr (Duke University), Lancaster, Pa.  
 Wagner, William Dean (Colgate University), Trenton, N. J.  
 Walker, James Warren (University of Scranton), Susquehanna, Pa.  
 Weaver, Lucius Stacy, Jr. (Duke University), Durham, N. C.  
 Webster, Richard Carlton (Duke University), Rochester, N. Y.  
 Wee, Jason Chito (University of Hawaii), Wahiawa, Hawaii.  
 Zimmerman, James Lawrence (Duke University), Durham, N. C.

## SECOND YEAR

Abelson, Robert Carl (Carnegie Institute of Technology), Chattanooga, Tenn.  
 Berman, Elliott (Duke University), Houlton, Me.  
 Boger, John Ray, Jr. (Duke University), Concord, N. C.  
 Brushner, Frederick Londis (University of Alaska), Fairbanks, Alaska.  
 Byrd, James Samuel (Duke University), Marion, N. C.  
 Carty, James Edward (Washington State College), Ridgefield, Wash.  
 Chisholm, Lorenzo Dow (Queens College), Charlotte, N. C.  
 Collins, Ira Taylor, Jr. (Duke University), Kingsport, Tenn.  
 Comer, Charles Alexander (University of Chattanooga), Chattanooga, Tenn.  
 Dunde, Wladyslaw (University of Alabama), Suffield, Conn.  
 Dwyer, John Andrew (Presbyterian Junior College), Whiteville, N. C.  
 Elkins, Robert Leroy (Marshall College), Logan, W. Va.  
 Folger, Fred (Duke University), Mount Airy, N. C.  
 Ford, Harold Edwin (Duke University), Richmond, Ind.  
 Franks, Bob Allen (University of Pittsburgh), Pittsburgh, Pa.  
 Fuller, Melville Weston, Jr. (Duke University), Durham, N. C.  
 Garber, Mark Edward, Jr. (Duke University), Carlisle, Pa.  
 Gerstein, Joe Willie (Duke University), Covington, Ga.  
 Gillis, Wellington Albert (Northwestern University), Malden, Mass.  
 Gilman, John Bruce, Jr. (Columbia University), White Plains, N. Y.  
 Graves, Ray (Washington State College), Pe Ell, Wash.  
 Hautamaki, Edward William (Duke University), Mass, Mich.  
 Henkel, Lee Hampton, Jr. (Duke University), Charleston, W. Va.  
 Henry, John Frederick (Duke University), Morrisville, N. Y.  
 Hooper, Glenn Lee, Jr. (Duke University), Dunn, N. C.  
 Joseph, Charles Howard (University of Delaware), Georgetown, Del.  
 Levinson, Joe Herman (Duke University), Benson, N. C.  
 Lewis, John R. (University of Washington), Coulee City, Wash.  
 Marlowe, Wallace Ted (Marshall College), Roanoke, Va.  
 Messick, Turner Paul (Elon College), Burlington, N. C.  
 Miller, David Thomas (U. of North Dakota Law School), Tuttle, N. D.  
 Montemuro, Frank John, Jr. (Temple University), Philadelphia, Pa.  
 Moscou, Joseph Jay (Hobart College), New York, N. Y.  
 Myers, Jay Walter (Pennsylvania State College), Berwick, Pa.  
 Novick, Alphonus Charles (State Teachers College (Pa.)), Frackville, Pa.  
 Oshiro, Robert Chosei (University of Hawaii), Wahiawa, Hawaii.  
 Propst, Clyde Luther, Jr. (Duke University), Concord, N. C.  
 Robinson, Edward Norwood (United States Military Academy), Roseboro, N. C.  
 Rokos, William Jay (Duke University), Manchester, N. H.  
 Scharf, Justin Norbert (American University), Philadelphia, Pa.  
 Scuderi, Peter (Temple University), Philadelphia, Pa.  
 Seay, Thomas Waller, Jr. (Duke University), Spencer, N. C.  
 Smith, Bill Lee (Juniata College), Fayette City, Pa.  
 Smith, Charles Slack (Lafayette College), Easton, Pa.



Smith, Herman Amasa (U. of North Carolina Law School), Dnrham, N. C.  
 Spencer, Joseph Whitney (Ohio State University), Piqua, Ohio.  
 Stett, Grady Bernell (Duke University), Bailey, N. C.  
 Sugarmann, Alan Cecil (Duke University), Asbury Park, N. J.  
 Taylor, Robert Charles (Duke University), New Orleans, La.  
 Thompson, James Edward (Duke University), Oak Hill, W. Va.  
 Thomjson, Richard Carroll (Lenoir-Rhyne College), Hickory, N. C.  
 Thornhill, Warren Ashby III (Virginia Polytechnic Institute), Beckley, W. Va.  
 Upchurch, Roger Stanley (Duke University), Durham, N. C.  
 Van Anda, Jack Nicholas (Duke University), Durham, N. C.  
 Vann, Arthur (Duke University), Dunn, N. C.  
 Warren, James Gates (Duke University), Washington, D. C.  
 Weldon, Richard Thomas (Elon College), Durham, N. C.  
 Willeford, Brice James, Jr. (Duke University), Kannapolis, N. C.

## THIRD YEAR

Allen, Carnot Richardson, Jr. (Northwestern University), Winnetka, Ill.  
 Anderson, Hugh Roger (U. of Ga. Law School), Hayesville, N. C.  
 Barfield, James Roy (Duke University), Pikeville, N. C.  
 Bebout, Donald Richard (Phoenix Junior College), Washington, Pa.  
 Boddie, Mrs. Grace Collins (State Teachers College (Va.)), Durham, N. C.  
 Booker, James Jackson (Washington Univ. Law School), Timberlake, N. C.  
 Bostwick, John Allen, Jr. (Duke University), Birmingham, Ala.  
 Browning, James Richardson (Duke University), Whiteville, N. C.  
 Caldwell, Robert Tate, Jr. (Harvard University), Ashland, Ky.  
 Chaffin, John Taylor (Duke University), South Mills, N. C.  
 Chappell, Thomas Tye (Duke University), Plainfield, N. J.  
 Claycomb, Charles Percival, Jr. (Western Kentucky State Teachers College), Webster, Ky.  
 Clement, Robert Leiby, Jr. (The Citadel), Charleston, S. C.  
 Dodge, Harold Thaddeus (Champlain College), Loudonville, N. Y.  
 Douglas, Richard Sands (Duke University), Westfield, N. J.  
 Duntour, Alfred Edmondston (The Citadel), Durham, N. C.  
 Dufour, Mrs. Milly Smith (Duke University), Durham, N. C.  
 Ely, William Thomas (Murray State Teachers College), Benton, Ky.  
 Engelman, Morton Henry (University of Connecticut), Middlebury, Conn.  
 Everette, Ned Purvis (Davidson College), Robersonville, N. C.  
 Fleming, James Carlton (Duke University), Creedmoor, N. C.  
 Foss, George Bridges, Jr. (Birmingham-Southern College), Birmingham, Ala.  
 Foster, Russell D. (Bethany College), Cardale, Pa.  
 Free, Edgar Dauphin (University of Pennsylvania Law School), Philadelphia, Pa.  
 Glickfield, David (East Tennessee State College), Johnson City, Tenn.  
 Godfrey, George Franklin (Duke University), Jacksonville, Fla.  
 Gore, Jay, Jr. (University of Mississippi), Grenada, Miss.  
 Gregg, James Russell (State College of Washington), Pullman, Wash.  
 Grist, William Taylor (Lenoir-Rhyne College), Charlotte, N. C.  
 Harlem, Arnold (New York University), Brooklyn, N. Y.  
 Harrington, John Alien (Duke University), Merry Oaks, N. C.  
 Hawkins, James Robert (Duke University), Mebane, N. C.  
 Herrick, John Waters (Stanford Law School), Jamestown, N. Y.  
 Hiasen, Kermit Odel (Emory University), Fort Lauderdale, Fla.  
 Holmes, James Theodore (William & Mary Law School), Cedar Rapids, Iowa.  
 Hondulus, John Louis (University of Tennessee), Knoxville, Tenn.  
 Howe, Standish Sturtevant (University of Michigan), Port Huron, Mich.  
 Howe, William Bell White (Duke University), Hendersonville, N. C.  
 Jack, Robert George (Ohio State University), Nelsonville, Ohio.  
 Kanehann, William Nicholas, III (Columbia University), Allentown, Pa.  
 Klein, Frederic Milton (Tufts College), New Haven, Conn.  
 Koski, Henry William (Ohio Wesleyan University), Ashtabula, Ohio.  
 Kupp, Elaine Beatrice (Duke University), Depew, N. Y.  
 Larned, George Hambury (Rutgers University), Rutherford, N. J.  
 Loeser, Edward Arthur (Knox College), Galesburg, Ill.  
 McCoy, John Philip (Duke University), Mount Pleasant, Tenn.  
 McKinnon, Arnold Borden (Duke University), Lumberton, N. C.  
 Malloy, Cormac Joseph (Elon College), Philadelphia, Pa.  
 Marsh, John Earl, Jr. (University of Tennessee Law School), Petersburg, Tenn.  
 Martin, George Wilson (Duke University), Mocksville, N. C.  
 Marx, Edward Elias (Franklin & Marshall College), New York, N. Y.  
 Millar, William Imber (Duke University), Waynesville, N. C.  
 Morrow, George Richard (West Virginia Institute of Technology), Forest City, N. C.  
 Morton, Marion Billy (Duke University), Albemarle, N. C.  
 Nazor, Gordon Lang (Duke University), Ashtabula, Ohio.  
 Nichols, Frank David (University of Michigan), Cleveland, Ohio.  
 Olsen, Robert Wayne (University of Michigan), Sioux Falls, S. D.  
 Oppenheim, Alfred Martin (Duke University), Westfield, N. J.  
 Orr, George Eadie (Duke University), Miami, Fla.  
 Page, Robert Lionel (Duke University), Erick, Okla.  
 Pavey, Charles Robert (University of Illinois), Lawrenceville, Ill.  
 Perlis, Marvin Elliott (New York University), Kew Gardens, L. I., N. Y.  
 Perry, James Franklin (Michigan State College), Lansing, Mich.  
 Pierce, John Everett, Jr. (University of Florida), Daytona Beach, Fla.

Rabin, David (Duke University), Carrboro, N. C.  
 Rickman, William Millender (Duke University), Asheville, N. C.  
 Rosenberg, Frederick Dietrick (Hamilton College), Binghamton, N. Y.  
 Russell, Howard Mills (University of California at Los Angeles), Wilmington, N. C.  
 Sands, George Lewis (Duke University), Wilmington, Del.  
 Scott, James Allen (Duke University), Concord, N. C.  
 Shell, Vernon Melvin (Furman University), Greenville, S. C.  
 Simmous, Roy Gleu (Oberlin College), Maunahawkin, N. J.  
 Spence, Charles Wilson (Duke University), Clayton, N. C.  
 Stearns, Donald Mosure (Otterbein College), Lima, Ohio.  
 Stevenson, William Hartin, Jr. (Presbyterian College), Sumter, S. C.  
 Styers, Robert Lee (Duke University), Winston-Salem, N. C.  
 Surratt, John Richard (University of North Carolina), Winston-Salem, N. C.  
 Thomaides, Theodore George (Duke University), Washington, D. C.  
 Thomasson, George Butler (Davidson College), Kings Mountain, N. C.  
 Thomassen, James Toombs, Jr. (West Georgia College), La Grange, Ga.  
 Villanueva, Charles Edward (Duke University), Orange, N. J.  
 Williamson, Edward Lorenza (Wake Forest College), Cerro Gordo, N. C.  
 Wright, James Victor (Duke University), Java, Va.  
 Zwanetz, David (Temple University), Philadelphia, Pa.

## GRADUATE STUDENTS

Chappell, Howard (University of Illinois, U. of Kansas City Law School), Kansas City, Mo.  
 Fisanick, Vasil (St. Francis College, U. of Richmond Law School), Barnesboro, Pa.  
 Foster, Robert Watson (University of South Carolina, U. of South Carolina Law School),  
 Charlotte, N. C.  
 Hardin, Walton (University of Georgia, John B. Stetson Law School), Winston-Salem, N. C.  
 Irwin, John Jackson, Jr. (College of Charleston, U. of South Carolina Law School), Charles-  
 ton, S. C.  
 Lindsey, Harold Isaac (College of Charleston, U. of South Carolina Law School), Charles-  
 ton, S. C.  
 Mervine, William David (Williams College, Duke Law School), Phoenixville, Pa.  
 Rice, Oliver Appleton (Presbyterian College, U. of South Carolina Law School), Lancaster,  
 S. C.

## UNCLASSIFIED STUDENTS

Griffin, Charles Franklin (University of North Carolina, Duke Law School), Monroe, N. C.  
 Gwyn, Allen Hatchett, Jr. (Duke University, Duke Law School), Reidsville, N. C.  
 Johnson, George A. H. (Virginia Polytechnic Institute), Elon College, N. C.  
 Mann, Everett J. (University of Rochester, University of Michigan), Durham, N. C.  
 Stout, Mrs. Lina Spence (Meredith College), Durham, N. C.  
 Taylor, Delores (Milwaukee-Downer College), Milwaukee, Wis.

*School of Medicine*

## FIRST YEAR

Adamson, Jerry Eugene (West Virginia University), New Martinsville, W. Va.  
 Arthur, Robert Miller (George Washington University, University of North Carolina), Hills-  
 boro, N. C.  
 Aycock, William Glenn (Duke University), Fremont, N. C.  
 Ayers, John Clifford, Jr. (Duke University), Nichols, S. C.  
 Barr, Frank Woodworth, Jr. (Davidson College), Charlotte, N. C.  
 Barrett, John Albert, Jr. (Duke University), Mt. Holly, N. C.  
 Bethune, William Murphy, Jr. (Wake Forest College), Clinton, N. C.  
 Bouzard, Walter Carroll (Lenoir-Rhyne College), Durham, N. C.  
 Brandy, Joseph Ralph, Jr. (University of Rochester), Ogdensburg, N. Y.  
 Brewer, John Mickle, Jr. (University of North Carolina), Kershaw, S. C.  
 Brock, Charles Lee (Duke University, Asheville-Biltmore College), Asheville, N. C.  
 Buckley, Charles Edward, III (Virginia Polytechnic Institute), Charleston, W. Va.  
 Carr, Henry James, Jr. (Elon College, Wake Forest College), Roseboro, N. C.  
 Clement, James Edwin (University of North Carolina), Raleigh, N. C.  
 Cohen, Harvey Jay (University of North Carolina), Columbia, S. C.  
 Constantine, Thomas Moore (Duke University), Racine, Wis.  
 Craddock, John Goodwin, Jr. (Belmont Abbey Junior College, Duke University), Charlotte,  
 N. C.  
 Crevasse, Lamar Earle, Jr. (Duke University), Tampa, Fla.  
 Davis, Arnold Van Osdal (Duke University, University of Louisville), New Albany, Ind.  
 DeLaughter, George Dewey, Jr. (George Washington University, Duke University), Dur-  
 ham, N. C.  
 DePass, Skottowe Wannamaker (The Citadel, Duke University), Camden, S. C.  
 Elliott, James Francis (Lenoir-Rhyne College), Charlotte, N. C.  
 Finch, Charlie Bryan (Mars Hill College, Wake Forest College), Oxford, N. C.  
 Floyd, Marian Anita (Florida State University, Duke University), Winter Park, Fla.  
 Forrester, Eugene Norwood (University of Florida, University of North Carolina, Duke  
 University), Dinsmore, Fla.

Friend, Louise Elaine (Roanoke College), Accident, Md.  
 Gore, John Pratt (University of Richmond, Clemson College, Wake Forest College), Asheville, N. C.  
 Gould, Kenneth George, Jr. (Duke University), Tampa, Fla.  
 Hair, Thomas Eugene, Jr. (University of South Carolina), Columbia, S. C.  
 Hodge, Raymond Harvey, Jr. (Citadel, Rice Institute), Tyler, Tex.  
 Helms, William Kendall, Jr. (Duke University), Columbia, S. C.  
 Hewitt, Wilmer Clyde, Jr. (College of Puget Sound, University of Washington), Tacoma, Wash.  
 Hill, Paul Edward (Western Carolina Teachers College, University of North Carolina), Murphy, N. C.  
 Holden, Alan Berle (Keystone Junior College, Columbia University, University of Michigan), Belle Harbor, N. Y.  
 Holland, Hal Curtis (Idaho State College, College of Idaho, University of Utah, Brigham Young University, Stanford University Graduate School), Idaho Falls, Idaho.  
 Horsley, Howard Theodore (Wake Forest College), Franklin, N. C.  
 Huber, Donald Simon (Duke University), High Point, N. C.  
 Hudmon, I. Stanton, Jr. (Duke University), Jacksonville, Fla.  
 Ira, Gordon Henry, Jr. (Duke University), Jacksonville, Fla.  
 Jackson, Benjamin Taylor (Duke University), Jacksonville, Fla.  
 James, Charles Alston (Citadel), Columbia, S. C.  
 Jones, James David (Virginia Military Institute), Dallas, Tex.  
 Jones, William Burrell (Citadel), Ocala, Fla.  
 Kelley, James Marvin, Jr. (Southern Methodist University, Rice Institute), Dallas, Tex.  
 Kelly, Richard Alexander, Jr. (Wake Forest College), Matthews, N. C.  
 Kenaston, Thomas Corwin, Jr. (Duke University), Cocoa, Fla.  
 Losin, Sheldon (University of Maryland, New York University), Baltimore, Md.  
 Ludlow, Enoch Andrus (Brigham Young University), Spanish Fork, Utah.  
 Magee, George Franklin (University of Nevada, University of California), Reno, Nev.  
 Mattox, Hult Everett, Jr. (Duke University, Concord College), Bluefield, W. Va.  
 McGerity, Joseph Loehr (Georgetown University, Columbia University, Duke University), West Palm Beach, Fla.  
 McGowan, Jack Landis (Tulane University, Emory University, University of North Carolina), Hamlet, N. C.  
 Mebane, Giles Yancey (Duke University), Raleigh, N. C.  
 Melton, Robert Allen (Duke University), Wilmington, N. C.  
 Morgan, Thomas Edward, Jr. (Duke University), Jacksonville, Fla.  
 Muskamp, George Howard (University of Cincinnati), Cincinnati, Ohio.  
 Newman, Ernest Gustave (Duke University), Pensacola, Fla.  
 O'Neill, James Flemister (Princeton University, Duke University), Savannah, Ga.  
 Past, Si Alexander, Jr. (University of Chattanooga, Duke University), Chattanooga, Tenn.  
 Patton, Robert Gray (Yale University, Duke University), Durham, N. C.  
 Pierson, George Herman, Jr. (Washington and Lee University), Charleston, W. Va.  
 Pinsker, Henry (William and Mary, New York University), Paterson, N. J.  
 Potter, Clyde Randolph, Jr. (Wake Forest College), Belhaven, N. C.  
 Ramey, James William (University of Kentucky), Mt. Sterling, Ky.  
 Rippy, Girard Crawford, Jr. (Furman University, Duke University), Greenville, S. C.  
 Shapiro, Oscar William (Duke University), Newark, N. J.  
 Shugerman, Earle Hillel (Birmingham-Southern College, University of Alabama), Birmingham, Ala.  
 Sing, Robert Lloyd, Jr. (University of North Carolina, Queens College), Charlotte, N. C.  
 Skipworth, George Brook (University of Georgia, Duke University), Columbus, Ga.  
 Spach, Madison Stockton (Duke University), Winston-Salem, N. C.  
 Stallings, Tolbert Lacy, Jr. (University of Mississippi, North Georgia College, N. C. State College, University of Fribourg (Switzerland), Duke University), Louisburg, N. C.  
 Talley, William Clinton (Guilford College, University of North Carolina), Greensboro, N. C.  
 Tannehill, Antone Walter, Jr. (Vanderbilt University), Hattiesburg, Miss.  
 Thomas, Annabelle (University of North Carolina), Burlington, N. C.  
 Tickle, Dewey Reid (Duke University), Burlington, N. C.  
 Verner, John Victor, Jr. (University of Mississippi, North Georgia College, North Carolina State College, Duke University), Danville, Va.  
 Vetter, John Stanley (Wake Forest College), Mt. Olive, N. C.  
 Wanzer, Sidney Hovey (Duke University), Charlotte, N. C.  
 Williams, Kenneth Trotter (Duke University), Charlotte, N. C.  
 Yudell, Robert Ben (Duke University), New Bern, N. C.

## SECOND YEAR

Adams, Reuben Homer, Jr. (University of Cincinnati, Southern Methodist University), Union, N. J.  
 Appen, Raymond Carl (Duke University), Somerset, Ky.  
 Ayerst, Robert Irvin (Yale University, Duke University), Connellsville, Pa.  
 Bacos, James Michael (Virginia Polytechnic Institute), Brooklyn, N. Y.  
 Baer, Bruce Lawrence (Duke University, Haverford College), Chapel Hill, N. C.  
 Bell, William Reed (University of Florida, University of the South), Pensacola, Fla.  
 Berlin, Melvin (Duke University), Savannah, Ga.  
 Berry, Joseph Norman (Clemson College), Charleston, S. C.  
 Blackard, Embree Iloss, Jr. (Duke University), Gastonia, N. C.  
 Bondurant, Stuart Osborne, Jr. (University of North Carolina), Winston-Salem, N. C.  
 Boren, Richard Benjamin, III (University of North Carolina), Greensboro, N. C.  
 Brice, George Wilson, Jr. (Duke University), Charlotte, N. C.

Bridges, Ronzee McIntyre (Louisiana State University, Duke University), Shreveport, La.  
 Brockmann, John Lyndon (University of North Carolina), High Point, N. C.  
 Bryant, Gerald Nelson, Jr. (High Point College, University of North Carolina), Statesville, N. C.  
 Bullard, Lubin Fletcher, Jr. (University of North Carolina), Garland, N. C.  
 Butler, William Gilbert, Jr. (University of North Carolina), Laurinburg, N. C.  
 Caffey, John William, Jr. (Duke University), Greensboro, N. C.  
 Cain, Frank Coral, Jr. (Catawba College), Salisbury, N. C.  
 Carter, Needham Battle (Duke University), Rocky Mount, N. C.  
 Casto, Dorothy Louise (West Virginia University), Morgantown, W. Va.  
 Chick, Ernest Watson (Duke University), Durham, N. C.  
 Chittum, John Raymond (Wooster, Duke University), Wooster, Ohio.  
 Cobey, William Gray (University of Minnesota, University of the South), Louisburg, N. C.  
 Earley, Charles Marion, Jr. (Duke University), Norfolk, Va.  
 Edwards, Ian Keith (Duke University), Easley, S. C.  
 Evans, Eugene Micheaux, Jr. (Duke University), Durham, N. C.  
 Evans, William Canfield, Jr. (Duke University), Gainesville, Fla.  
 Fishel, John Lewis (University of North Carolina), Winston-Salem, N. C.  
 Flanagan, John Francis (Virginia Polytechnic Institute), Blacksburg, Va.  
 Fogleman, Ross Lee, Jr. (Cornell University, Guilford College, Duke University), Greensboro, N. C.  
 Fowler, William Robert (University of North Carolina), Pilot Mountain, N. C.  
 Garlington, Laurens Nelson (Duke University), Birmingham, Ala.  
 Gibbs, Robert Walter (University of South Carolina), Columbia, S. C.  
 Gleason, William Lounsbery (Duke University), Daytona Beach, Fla.  
 Glenn, James Francis (University of Kentucky, University of Rochester), Lexington, Ky.  
 Hall, Kenneth Daland (Duke University), Durham, N. C.  
 Haworth, Sara Eldora (Guilford College), High Point, N. C.  
 Hicks, Julius Norton (Duke University), Enterprise, Ala.  
 Hillman, Charles Harlan (Virginia Polytechnic Institute), Blacksburg, Va.  
 Keck, Charles, Jr. (Cornell University, Duke University), New York, N. Y.  
 Kent, Alfred Henry (Duke University), Winter Park, Fla.  
 Kernode, Donald Reid (Elon College), Elon College, N. C.  
 Lyday, William Davie (Davidson College), Gastonia, N. C.  
 Mabey, Paul Alexander, Jr. (Wake Forest College), Morganton, N. C.  
 Mabry, Edward Bloxton (Duke University), Greensboro, N. C.  
 McArn, Hugh Munroe, Jr. (Davidson College), Laurinburg, N. C.  
 McCall, John B., Jr. (University of Virginia, Duke University), Jacksonville, Fla.  
 McNeely, Irwin Hollar (Duke University), Morganton, N. C.  
 Meiselman, Rude Karmus (Brown University), Charlotte, N. C.  
 Metcalf, Boyd Hendren (Duke University), Chevy Chase, Md.  
 Niblock, Franklin Chalmers, Jr. (Oregon State College, Davidson College), Concord, N. C.  
 Overton, Dolphin Henry, Jr. (Virginia Military Institute), Shelby, N. C.  
 Parker, Mayon Vann (Duke University), Durham, N. C.  
 Parkerson, George Robert, Jr. (Duke University), Macon, Ga.  
 Pierce, Ellison Cline, Jr. (University of Virginia), Gastonia, N. C.  
 Pollard, Lawrence Welford, Jr. (University of South Carolina), Columbia, S. C.  
 Rankin, Richard Brandon, Jr. (Wake Forest College), Concord, N. C.  
 Roof, Anne Carolyn (University of South Carolina), Columbia, S. C.  
 Rosemond, Robert Malone (Duke University), Charleston, S. C.  
 Sager, Samuel Ott (Duke University), Danville, Va.  
 Somers, James Earl (North Carolina State College, University of North Carolina), Burlington, N. C.  
 Stickel, Delford LeFew (Duke University), Martinsville, W. Va.  
 Tatton, Louis (Duke University), Ft. Monmouth, N. J.  
 Terrell, Thomas Eugene (Guilford College), Greensboro, N. C.  
 Urban, Adolph Joseph (University of North Carolina), Newark, N. J.  
 Vestal, Tom Alford (University of North Carolina), Rocky Mount, N. C.  
 Watt, Thomas Bunyan, Jr. (U. S. Naval Academy, Duke University), Hartsville, S. C.  
 Welch, George Harrison, Jr. (Duke University), Anderson, S. C.  
 Williams, Jean Babington, Jr. (Duke University), Hendersonville, N. C.  
 Williams, Jesse Lee, Jr. (Harvard University, University of Florida), Jacksonville, Fla.  
 Winslow, Francis Edward, Jr. (Harvard University, University of North Carolina), Rocky Mount, N. C.  
 Woodbury, Philip Stephen (Duke University), Pearisburg, Va.  
 Worsham, Julius Berry, Jr. (Duke University), Ruffin, N. C.  
 Young, Charles Gibson (Wake Forest College), Winston-Salem, N. C.

## THIRD YEAR

Agner, Marshal Edward (Lenoir-Rhyne College), Spencer, N. C.  
 Alexander, Lawrence Melton (Duke University), Lexington, N. C.  
 Altany, Franklin Edward (University of Mississippi, St. Vincent College), Brackenridge, Pa.  
 Alter, George Frederick (Ohio State University, University of Toledo), Toledo, Ohio.  
 Anderson, William Henry, Jr. (Presbyterian College), West Point, Ga.  
 Ardrey, William Benjamin, III (The Citadel), Fort Mill, S. C.  
 Baldwin, Kenneth Rone (Duke University), Whiteville, N. C.  
 Bethany, Joe Jackson, Jr. (University of Alabama), Boligee, Ala.  
 Bowen, James Lamar (Duke University), Westminster, S. C.  
 Bowles, Richard Morgan (Duke University), Long Island, N. Y.  
 Brass, Phillip (New York University, Seton Hall College), Newark, N. J.



- Brewer, Spencer Spainhour, Jr. (The Citadel, University of Georgia), Atlanta, Ga.  
 Burks, Henry Lucius (University of Texas), Tyler, Texas.  
 Chambers, Robert Edward (University of Oklahoma), Oklahoma City, Okla.  
 Chears, William Crockett, Jr. (Duke University), Charlotte, N. C.  
 Coggeshall, Berryman Edwards, Jr. (Duke University), Darlington, S. C.  
 Cooper, Frank Benton (Davidson College, University of North Carolina), Statesville, N. C.  
 Corpening, Joseph Durham (University of North Carolina), Granite Falls, N. C.  
 Cox, Howard Louis (Wake Forest College, Duke University), Jonesboro, N. C.  
 \*Crowder, John Nathaniel (Duke University), High Point, N. C.  
 Davenport, Clifton (Duke University), Durham, N. C.  
 David, Noble Jonathan (Duke University), Jacksonville, Fla.  
 Davidson, Norman William (Franklin & Marshall College), Baltimore, Md.  
 Davidson, William David (Univ. of Arizona, Duke University), Los Angeles, Calif.  
 Dees, John Tyler (University of North Carolina), Burgaw, N. C.  
 Frazer, Joe Walton, Jr. (Clemson College), Charlotte, N. C.  
 Futrell, Mary Frances (Peabody College, Univ. of Kentucky), Cadiz, Ky.  
 Garrett, Spencer Roberts (Alabama Polytechnic Institute, Univ. of Miami), Columbus, Ga.  
 Gomez, Alphonse Charles (Dakota Wesleyan Univ., St. Louis Univ.), LaPaz, Bolivia, S. A.  
 Graham, Harvey Polhemus (Duke University), Pearl River, N. Y.  
 Hampton, Ambrose Gonzales, Jr. (The Citadel), Raleigh, N. C.  
 Hartley, James Phillip (N. C. State College, Univ. of Florida), Miami, Fla.  
 Jackson, Elizabeth Claire (Duke University), Portland, Conn.  
 Jeter, Robert Vernon (N. C. State College, Duke University), Raleigh, N. C.  
 Jones, William Bailey (Mass. Institute of Tech., Duke University), Mobile, Ala.  
 Kaicher, Thomas Victor (Holy Cross College), Brooklyn, N. Y.  
 Kawchak, James (Duke University), Johnstown, Pa.  
 Kimmelstiel, Ruth (Randolph-Macon College), Charlotte, N. C.  
 Kinder, Jack (Duke University), Passaic, N. J.  
 Langley, Thomas Ellison (East Carolina Teachers College, Wake Forest College), Greenville, N. C.  
 Link, Robert Jeffrey (Bethany College), Uniontown, Pa.  
 Lourie, Herbert (Univ. of South Carolina), St. George, S. C.  
 Magill, Frank Bell (Univ. of Illinois, Va. Polytechnic Institute), Shanghai, China.  
 Marder, Gerard (Biltmore Jr. College, Univ. of North Carolina), Asheville, N. C.  
 McCall, Michael Alvin (Vanderbilt University, N. C. State College, U. N. C. Extension), Marion, N. C.  
 McCarley, Ben Pushmataha (Virginia Military Institute, Southern Methodist University), McAlester, Okla.  
 McClung, Eugene (West Va., Wesleyan, Duke University), Beckley, W. Va.  
 Meyer, George Wright (Univ. of North Carolina), Chapel Hill, N. C.  
 Michaels, Marilyn Jean (Duke University), Gadsden, Ala.  
 Miller, Augustus Taylor, Jr. (University of North Carolina), College Park, Ga.  
 Moody, William Alton (Clarion State Teachers College, Wake Forest College), Rockingham, N. C.  
 Moore, de Saussure Parker, Jr. (Univ. of North Carolina), Kingstree, S. C.  
 Morris, Francis Albert, Jr. (Univ. of Texas), Beaumont, Texas.  
 Mott, Helen Josephine Elizabeth (Custer County Junior College, Montana State College), Miles City, Mont.  
 Paar, James Albert (Duke University), Warren, Ohio.  
 Park, Charles Wilbur (Kent State, Mount Union, Ohio State), Columbus, Ohio.  
 Peedin, James Harold, Jr. (University of North Carolina), Selma, N. C.  
 \*Perry, William John (Sacramento Junior College, University of California, American University), Grass Valley, Calif.  
 Pryor, John Ray (Univ. of Louisville, Univ. of Kentucky), Mayfield, Ky.  
 Reed, Clark Grant (San Jose State College), San Jose, Calif.  
 Reinmuth, Oscar McNaughton (Univ. of Texas), Austin, Texas.  
 Savitt, Allen Jack (Duke University), Ansonia, Conn.  
 Shapiro, Lewis (Duke University), Great Neck, N. Y.  
 Skeen, Max Verne (Princeton University), High Rock, N. C.  
 Smith, George Bryan, Jr. (Duke University), Greenville, S. C.  
 Smith, Joseph James Lawton (Furman University, Emory University), Greenville, S. C.  
 Stennett, Clarence Ernest (Concord College), Princeton, W. Va.  
 Stewart, Edgar Bethea (The Citadel), Laurinburg, N. C.  
 Tahan, Naim George (Univ. of Iowa, Univ. of Arizona), Tucson, Ariz.  
 Travis, Burton Lester (Cornell University, Columbia University, Univ. of North Carolina), New York, N. Y.  
 Wallace, John Dixon, Jr. (Duke University, Alabama Polytechnic Institute, Univ. of Kentucky), Charlotte, N. C.  
 Wansker, Bernard Arthur (Duke University), Athens, Ga.  
 Warren, Donald Eugene (Florida Southern College, Washington and Lee University), Lakeland, Fla.  
 Wester, Millard Winston, Jr. (N. C. State College, Davidson College), Henderson, N. C.  
 Willis, Henry Kendall (University of North Carolina), McCain, N. C.  
 Wolf, Robert Lawrence (Duke University), Brooklyn, N. Y.  
 Wright, Henry Livingston, Jr. (Alabama Polytechnic Institute, Ball State Teachers College, Spring Hill College), Mobile, Ala.  
 Young, Robert Ulrich (Duke University), Swannanoa, N. C.

\* On leave of absence.



## SENIOR YEAR

- Agner, Roy Augusta, Jr. (Lenoir-Rhyne College, Washington University, Catawba College),  
 Spencer, N. C.  
 Austin, Charles Newton (West Virginia University, Duke University), Charleston, W. Va.  
 Austin, James Howard (Randolph-Macon Academy, Duke University), Valencia, Pa.  
 Bell, William Sterling (Schreiner Institute, Texas Christian University, Texas University),  
 Austin, Texas.  
 Bledsoe, Robert Eugene (University of Mississippi School of Medicine), University, Miss.  
 Blue, Willis Berton (David Lipscomb College, Vanderbilt University, Duke University),  
 Robards, Ky.  
 Booker, Laurena Park (Woman's College of the University of North Carolina), Greensboro,  
 N. C.  
 Brock, Julian Stanley (University of North Carolina), Rocky Mount, N. C.  
 Castle, Charles Hilmon (University of Mississippi School of Medicine), Pachuta, Miss.  
 Chase, George Oscar (University of Maine, Duke University), Millinocket, Maine.  
 Coggins, Deborah Ferne Reed (Florida State College for Women, University of Washington,  
 University of Tampa, University of Florida), Tampa, Fla.  
 Coggins, Wilmer Jesse, Jr. (Duke University), Madison, Fla.  
 Coleman, Blair Pickens (Rice Institute), Wichita Falls, Texas.  
 Conover, Raymond Everett (Baylor University), Neptune, N. J.  
 Cook, Paul Huie (Pfeiffer Junior College, Berry College, Duke University), Union Grove,  
 N. C.  
 Cranford, James Abram, Jr. (Washington and Lee University), Jacksonville, Fla.  
 Curtis, Thomas Edwin (Oklahoma University, Southwestern University, Oklahoma Univer-  
 sity), Miami, Okla.  
 Daniel, Thomas Manning (Louisburg College, Duke University), Oxford, N. C.  
 Dimmette, James Edwin (High Point College, University of Texas, Duke University), Laurel  
 Hill, N. C.  
 Drake, David Ewing (Duke University), Knoxville, Tenn.  
 Easterling, John Garlick (Duke University), Rocky Mount, N. C.  
 Ellis, Fred Wilson (University of North Carolina), Heath Springs, S. C.  
 Engel, Marvin Franklin (Duke University), Atlantic City, N. J.  
 Evans, Eugene Goldsmith, Jr. (Clemson College, Newberry College), Pendleton, S. C.  
 Ewy, Henry Herman (North Dakota State College, University of North Dakota Medical  
 School), Fargo, N. D.  
 Fair, William Leonard (University of Missouri, University of Wisconsin, University of  
 Missouri Medical School), Chillicothe, Miss.  
 Fink, Chester Walter (Duke University), Durham, N. C.  
 Gorsuch, Thomas Leonard (Duke University), Baltimore, Md.  
 Green, Paul, Jr. (Duke University), Thomasville, N. C.  
 Haltiwanger, Earl, Jr. (The Citadel, Emory University), Lake City, Fla.  
 Hanes, Kenneth Frederick (Geneva College, Mt. Union College), East Liverpool, Ohio.  
 Hanson, Charles Andrew (University of Michigan, Duke University), Geneva, Ill.  
 Hershberger, Robert LeRoy (Sam Houston State Teachers College, University of Texas),  
 La Porte, Texas.  
 Hiatt, Edwin Peelle (University of North Carolina), Wilmington, Ohio.  
 Hiatt, Rudger Puckett (Brigham Young University, University of New Mexico, University  
 of Arizona), Mesa, Ariz.  
 Holland, Malvern Carlyle (University of South Carolina, North Georgia College, Rutgers  
 University), Simpsonville, S. C.  
 Honig, Edward Irving (University of Buffalo, College of William and Mary), New York  
 City, N. Y.  
 Horne, Francis Gregg (The Citadel, Duke University), Sumter, S. C.  
 Inman, Charles Ernest (Wake Forest College, Duke University), Fairmont, N. C.  
 Jackson, Beverly Joy Neely (Duke University), Atlanta, Ga.  
 Jackson, Murray Threadgill, Jr. (Davidson College, Catawba College, Duke University),  
 Kannapolis, N. C.  
 Jaeger, Carl Alphons (Cornell University, St. Vincent College), Greenwich, Conn.  
 Johnston, David Hale (North Carolina State College, Duke University), Roper, N. C.  
 Kandel, Robert Franklin (Duke University), Louisville, Ohio.  
 Lockhart, David Armistead (Tulane University, University of the South), St. Helena's  
 Island, S. C.  
 Luzadre, John Hinkle (University of Pittsburgh), Sewickley, Pa.  
 Mandanis, John Peter (University of Athens, Wofford College), Spartanburg, S. C.  
 Mangum, Jack Fitch (The Citadel, Duke University), Hamlet, N. C.  
 McFadyen, Susan Routh (Woman's College of the University of North Carolina), Greens-  
 boro, N. C.  
 McGee, Harry Hand, Jr. (Ursinus College, Duke University), Savannah, Ga.  
 Melero, Andrés Tarcisio (University of Puerto Rico, Duke University), San Juan, P. R.  
 Mertz, Joanne Elizabeth (Purdue University), Logansport, Ind.  
 Parapid, Nicholas Vladimir (Sacramento Junior College, Catawba College), Salisbury, N. C.  
 Pruett, Charles Danny (Emory and Henry College, Duke University), Bluefield, Va.  
 Ragland, John Elliott (Princeton University), Orange, Calif.  
 Remus, Luis Enrique, Jr. (The Citadel), Santurce, P. R.  
 Reynolds, David Hyatt (Ohio State University), Dayton, Ohio.  
 Rice, Alonzo Douglas (Northwestern University, Concord College, West Virginia Univer-  
 sity, Duke University), Charleston, W. Va.  
 Schmidt, Evelyn D. (Duke University), N. Plainfield, N. J.  
 Schnoor, Ernest Edgar (University of California), Walnut Creek, Calif.

Sellers, Alfred Mayer (Temple University), Philadelphia, Pa.  
 Shancroft, Donald Yeoman (Princeton University), Brooklyn, N. Y.  
 Smith, Jesse Graham, Jr. (Duke University), Asheboro, N. C.  
 Stanley, Gordon Douglas (University of Florida), Sanford, Fla.  
 Sullenberger, John William (University of Tennessee, Carson-Newman College, Duke University), Tallahassee, Fla.  
 Underwood, Russell Spaldon (University of Notre Dame), Waynesville, N. C.  
 Walker, William Freeman (Duke University), Hazlehurst, Ga.  
 Walters, Paul Allen, Jr. (University of North Carolina), Durham, N. C.  
 Warren, Joseph Benjamin (Duke University), Lenoir, N. C.  
 Welch, James Edward (Virginia Polytechnic Institute, Duke University), Suffolk, Va.  
 Wester, Thaddeus Bryan (North Carolina College of A. & E., Carson-Newman College, Duke University), Henderson, N. C.  
 White, Ben Terry, II (Western Kentucky Teachers College, University of Kentucky), Cadiz, Ky.  
 Whitesides, Edward Steele (Davidson College, Michigan State Normal), Gastonia, N. C.  
 Williams, Harold Lee (Duke University), Greenville, N. C.  
 Williams, Louis Howard (Duke University), Greenville, N. C.  
 Wingfield, Robert Terrell (Virginia Military Institute, Duke University), Lynchburg, Va.

## *School of Nursing*

### FRESHMAN CLASS

Blalock, Doris Jean (W. C. U. N. C.), Burlington, N. C.  
 Bound, Margaret Sue (John B. Stetson University), West Palm Beach, Fla.  
 Britt, Mattie Herman (Pfeiffer Junior College), Fayetteville, N. C.  
 Brunson, Norma Janet (Queens College), Sumter, S. C.  
 Burgess, Betty Bahnson (W. C. U. N. C.), Winston-Salem, N. C.  
 Cobb, Frances Irene (Lenoir-Rhyne College), Cherryville, N. C.  
 Daniels, Edna Virginia (Duke University), New Bern, N. C.  
 Davis, Elsie Germaine (East Carolina Teachers College), Carthage, N. C.  
 Dees, Doris Jean (Wake Forest College), Pikeville, N. C.  
 Dennings, Jerre Maxine (W. C. U. N. C.), Benson, N. C.  
 Edwards, Mary Ruth (Louisburg Junior College), Godwin, N. C.  
 Elmore, Anne Elizabeth (W. C. U. N. C.), Elkin, N. C.  
 Ezzell, Lillian Shirley (W. C. U. N. C.), Dunn, N. C.  
 Facemire, Mary Ann (Fairmont State College), Fairmont, W. Va.  
 Flora, Betty Jane (Radford College), Rocky Mount, Va.  
 Foster, Virginia Lee (Louisiana State University), Durham, N. C.  
 Fuller, Elizabeth Ann (Winthrop College), Cherryville, N. C.  
 Gathwood, Laura Maude (Stratford College), Danville, Va.  
 Griffith, Jean Elizabeth (Madison College), Strasburg, Va.  
 Hampton, Nanna Joyce (Gardner-Webb College), Winston-Salem, N. C.  
 Harper, Barbara Ann (W. C. U. N. C.), Charlotte, N. C.  
 Haynes, Shirley Louise (East Carolina Teachers College), Goldsboro, N. C.  
 Hooker, Rowena Ann (Florida State University), West Palm Beach, Fla.  
 Johnson, Betty (William & Mary College), Westfield, N. J.  
 Johnston, Elizabeth (Peace College), Durham, N. C.  
 Jones, Margaret Evelyn (Sullins College), Durham, N. C.  
 Kime, Mary Lois (Duke University), Bala-Cynwyd, Pa.  
 Lamond, Mary Wilson (Duke University), Alexandria, Va.  
 Larson, Betty Jane (Florida State University), Tallahassee, Fla.  
 Marchman, Llewellyn (Armstrong College), Savannah, Ga.  
 Miller, Joan Frances (Duke University), St. Petersburg, Fla.  
 Mouillesseaux, Joyce (New Jersey College for Women), Glen Rock, N. J.  
 Ozanne, Dorothy Mae (University of Miami), Miami, Fla.  
 Pruitt, Mildred Margaret (Madison College), Churchland, Va.  
 Reynolds, Norma Hurley (Concord State Teachers College), Princeton, W. Va.  
 Rice, Virginia Dare (Montgomery Junior College), Silver Spring, Md.  
 Richardson, Betty Jean (Averett Junior College), Front Royal, Va.  
 Rogers, Gwendolyn Lou (Rollins College), Burlington, N. C.  
 Roman, Joanna Phyllis (University of Miami), Coral Gables, Fla.  
 Sarratt, Ann Elizabeth (Duke University), Gaffney, S. C.  
 Schellenberg, Shirley Anne (Wake Forest College), Lancaster, S. C.  
 Smith, Eunice Mae (Pfeiffer Junior College), New London, N. C.  
 Smith, Janet Horne (Winthrop College), Florence, S. C.  
 Southerland, Carolyn Ann (W. C. U. N. C.), Burgaw, N. C.  
 Urdaneta, Maria Luisa (W. C. U. N. C.), Greensboro, N. C.  
 Vashaw, Jeanne (University of North Carolina), Chapel Hill, N. C.  
 Watlington, Ida Mae (Madison College), Gretna, Va.  
 Williams, Bettie Josephine (Asheville-Biltmore College), Oteen, N. C.  
 Woodward, Mary Eleanor (Ohio Wesleyan University), Washington, D. C.  
 Wright, Nancy Lee (Pfeiffer Junior College), Fallston, N. C.  
 Yeager, Tessie Frances (Duke University), Jacksonville, Fla.  
 Young, Phyllis Marie (Madison College), Bassett, Va.

## JUNIOR CLASS

Bagwell, Robina Norwood (Duke University), Spartanburg, S. C.  
 Baynes, Julia Belle (Duke University), Hurdle Mills, N. C.  
 Bizzell, Betsy Bryan (Mars Hill College), Fayetteville, N. C.  
 Britt, Joanne Harriet (Mars Hill College), Fayetteville, N. C.  
 Champion, Evelyn Lucille (W. C. U. N. C.), Fayetteville, N. C.  
 Clark, Edna A. King (Maryville College), Charlotte, N. C.  
 Curtis, Sara Evelyn (East Tennessee State College), Washington College, Tenn.  
 Dyer, Mary Ann (Lynchburg College), South Boston, Va.  
 Ellwanger, Elizabeth Ann (University of Louisville), Louisville, Ky.  
 Fish, Barbara Dee (West Virginia Wesleyan College), Buckhannon, W. Va.  
 Fry, Sara JoeAnne (Duke University), McKeesport, Pa.  
 Greene, Elizabeth Kennedy (St. Petersburg Junior College), St. Petersburg, Fla.  
 Gutierrez, Betty Hobbs (Madison College), Locustville, Va.  
 Hergert, Virginia Lou (University of Miami), Coral Gables, Fla.  
 Jarvis, Vera Corrine (Florida State University), Orlando, Fla.  
 Kelbert, JoAnn (Florida State University), Bradenton, Fla.  
 Kline, Eleanor Marie (Alfred University), Frewsburg, N. Y.  
 Kohlmeier, Annette (Florida State University), North Miami, Fla.  
 McCaskill, Mary Rachel (Flora Macdonald College), Carthage, N. C.  
 McCullough, Kathryn (University of Wisconsin), Grosse Pointe, Mich.  
 McIver, Ella George (Mars Hill College), Siler City, N. C.  
 McLean, Joyce Condre (Greensboro College), Aberdeen, N. C.  
 McMillan, Harriet Jane (Furman University), Denmark, S. C.  
 Mahaffey, Nora E. (Mars Hill College), Lancaster, S. C.  
 Massey, Patricia Anne (Winthrop College), Rock Hill, S. C.  
 Mertz, Phyllis Jane (Duke University), Logansport, Ind.  
 Miller, Mildred Blackburn (King College), Dublin, Va.  
 Nielsen, Karen Gale (Duke University), Durham, N. C.  
 Page, Virginia Corinne (St. Mary's Junior College), Raleigh, N. C.  
 Painter, Frankie Jean (Queen College), Charlotte, N. C.  
 Peyton, Marion Elizabeth (The Rice Institute), Alexandria, Va.  
 Pike, Mary Eloise (Duke University), Beaufort, S. C.  
 Prosser, Betty Faye (Queens College), Lake City, S. C.  
 Reece, Patricia Ann (Duke University), Winston-Salem, N. C.  
 Rodgers, Patricia Eileen (Duke University), Cranford, N. J.  
 Shand, Nancy Herbert (University of Pennsylvania), Wynnewood, Pa.  
 Smith, Jessie R. (Duke University), Kinston, N. C.  
 Stevens, Cynthia Landis (Flora Macdonald College), Smithfield, N. C.  
 Tabler, Eleanor Virginia (Madison College), Martinsburg, W. Va.  
 Teague, Mildred Faye (W. C. U. N. C.), Winston-Salem, N. C.  
 Topham, Carol Clawson (Salem College), Clearwater Beach, Fla.  
 Wetherington, Elinor Mae (Florida State University), Miami, Fla.  
 Wilder, Vera Elizabeth (Mars Hill College), Atlanta, Ga.  
 Winegeart, Sallie Ann (Duke University), Jacksonville, Fla.

## SENIOR CLASS

Allen, Margaret Joan (Michigan State College), East Lansing, Mich.  
 Bartlett, Lorene M. (Fredonia State Teachers College), Forestville, N. Y.  
 Cato, Alma Sox (Winthrop College), Monetta, S. C.  
 Coleman, Betty Jean (Mars Hill Junior College), Winston-Salem, N. C.  
 Coleman, Norma Lee (Mars Hill Junior College), Winston-Salem, N. C.  
 Cook, Annie Luella (Newton Business School), Newton, S. C.  
 Cress, Vivian Elizabeth (Pfeiffer Junior College), Concord, N. C.  
 Erskine, Betty (Wake Forest College), Anderson, S. C.  
 Gilman, Roxanne Bounville (Meredith College), Norfolk, Va.  
 Herndon, Mary Yvonne (Greensboro College), Durham, N. C.  
 Hiltzheimer, Jane Senter (Wesleyan College), Pulaski, Va.  
 Hughes, Martha Bee (Duke University), Bartow, Fla.  
 Jaeger, Margaret Anne (University of Tennessee), Pittsburgh, Pa.  
 Jenkins, Lucia Murchison (Rice Business College), Charleston, S. C.  
 Ledford, Ethel Aileen (Brevard College), Harrisburg, Pa.  
 Lewis, Martha Rosalee (Catawbee College), Selbyville, Del.  
 Mahaffee, Margaret Fortune (Mitchell College), Charleston, S. C.  
 Menefee, Mary Anne (Duke University), Luray, Va.  
 Morris, Jacqueline (Winthrop College), Charleston, S. C.  
 Muldrow, Leonora Jeannette (Winthrop College), Sumter, S. C.  
 Nelson, Hilda Olive (Mars Hill Junior College), Durham, N. C.  
 Nicholson, Mary Elizabeth (Winthrop College), Edgefield, S. C.  
 Parsons, Nancy Ellen (Pfeiffer Junior College), Candor, N. C.  
 Perkins, Carolyn Mae (Milligan College), Clintwood, Va.  
 Plyler, Anna Clark (Winthrop College), Chester, S. C.  
 Scott, Kitty Jane (Roanoke College), Salem, Va.  
 Smith, Jane (Wheaton College), Burlington, N. C.  
 Snell, Anne Martha (Peace Junior College), Winston-Salem, N. C.  
 Stanford, Jean Elizabeth (Roanoke College), Salem, Va.  
 Stewart, Mildred Louise (East Tennessee State College), Johnson City, Tenn.  
 Sutherland, Dottie Louise (Salem College), Cincinnati, Ohio.  
 Tate, Mar jo (Louisiana State University), Baton Rouge, La.

Teal, Betty Jean (Greensboro College), Pine Bluff, N. C.  
 Trisdale, Suetta (Winthrop College), Sumter, S. C.  
 Truelove, Martha Jean (Mars Hill Junior College), Greensboro, N. C.  
 Walters, Pauline Jane (Maryville College), New Market, Tenn.  
 Watson, Betty Jewel (Florida State University), Punta Gorda, Fla.  
 Williams, Roberta Elizabeth (Florida State University), Jacksonville, Fla.  
 Wright, Wilma Roberts (Coker College), Tabor City, N. C.

## *School of Forestry*

- \*Allan, Kenneth Mathews (B.S.F., University of Michigan), Cleveland, Ohio.  
 \*Allen, James Clarence, Jr. (B.S.F., University of Georgia), Etowah, Tenn.  
 \*Applefield, Milton (B.S., New York State College of Forestry), Miami, Fla.  
 \*Barnes, Robert Lloyd (B.S., Duke University), Royersford, Pa.  
 \*Bell, John Frederick (B.S., Oregon State College), Ashland, Ore.  
 \*Bennett, Frank Autrelle (B.S.F., University of Georgia), Cordele, Ga.  
 \*Breadon, Robert Edwin (B.S.F., University of British Columbia), Vancouver, B. C.  
 \*Bree, Jacobus Christiaan (B.S., State College of Tropical Agriculture at Deventer, Holland), The Hague, Holland.  
 \*Brooks, David Emerson (B.S., University of Massachusetts), Waltham, Mass.  
 \*\*Brown, Frederick Allan, Jr. (B.S., University of Connecticut), Waterbury, Conn.  
 \*Byers, Donald V. (B.S.F., Montana State University), Missoula, Mont.  
 \*\*Buckner, Edward Reap (B.S., University of North Carolina), Chapel Hill, N. C.  
 \*Cantelou, Lamar Black (B.A., University of the South), Montgomery, Ala.  
 \*Carlson, Alan Ervin (B.S., University of Massachusetts), Lynn, Mass.  
 Carvell, Kenneth Llewellyn (A.B., Harvard University; M.F., Yale University), North Andover, Mass.  
 \*Curle, Lawrence Duke (B.S.F., North Carolina State College), Raleigh, N. C.  
 †Davis, Stuart Arthur Hamilton (B.S.F., University of New Brunswick), Fredericton, N. B.  
 \*\*\*Deetlefs, Philippus Petrus du Toit (B.S., University of Stellenbosch; M.F., Duke University), Clanwilliam, So. Africa.  
 \*Diamond, Sidney (B.S., New York State College of Forestry), New York, N. Y.  
 \*Dixon, Arthur Curtis (B.S.F., University of New Brunswick), Fredericton, N. B.  
 †Duperret, Donald Lucien (B.S., Holy Cross College), Teaneck, N. J.  
 \*Ference, George Melville (B.S., Pennsylvania State College), Pittsburgh, Pa.  
 \*Ferguson, Edwin Roudillon (B.S.F., Louisiana State University), Saucier, Miss.  
 \*Follett, George Leonard (B.S.F., Purdue University), Adams, Mass.  
 \*Foreman, Edwin Earl (B.S., Duke University), Durham, N. C.  
 \*Forsyth, Harold Frederic, Jr. (B.S.F., Montana State University), Rumford, R. I.  
 \*Furnival, George Mason (B.S.F., University of Georgia), Rixeyville, Va.  
 \*Ganley, Robert Verrill (B.S., University of Massachusetts), North Andover, Mass.  
 \*Gashwiler, Robert Novinger (B.S.F., Montana State University), Novinger, Mo.  
 \*Geiger, Walter Bernard (B.S., University of Connecticut), North Windham, Conn.  
 \*Gilmer, William Dryden (B.S., Duke University), Kingsport, Tenn.  
 \*Glabau, William Edward (B.S., University of Massachusetts), New Britain, Conn.  
 \*\*Godfrey, Bernard Ephraim (B.S., University of Connecticut), New Haven, Conn.  
 \*Haislet, John Alden (B.S.F., University of Georgia), Athens, Ga.  
 \*Hawes, Raymond Burke (B.S., Duke University), Northport, N. Y.  
 \*\*Hewlett, George Tyler (B.S., Lehigh University), Bridgeport, Conn.  
 †Huffman, Jacob Brainard (B.S., Virginia Polytechnic Institute; M.F., Duke University), Brunswick, Ga.  
 \*Ince, Gordon Anthony (B.S., Colorado A. & M. College), Racine, Wis.  
 \*Koch, Daniel Francis (B.S., Rutgers University), Elizabeth, N. J.  
 \*Lamond, Leo Daniel (B.S., University of Maine), Perry, Me.  
 \*Larrabee, Donald Ralph (B.S., University of Maine), South Windham, Me.  
 \*Lee, Robert Emil, III (B.S., Duke University), Durham, N. C.  
 \*McClurkin, Douglas Charles (B.S.F., University of Georgia), Jacksonville, Fla.  
 \*\*Malac, Barry (University of Prague), Durham, N. C.  
 \*Maple, William Robert (B.S., Rutgers University), Lawrenceville, N. J.  
 \*Massey, William Everard, Jr. (A.B., Duke University), Charlotte, N. C.  
 Mathewson, Clarke (A.B., University of North Carolina; M.F., North Carolina State College), Raleigh, N. C.  
 \*May, Robert Legard (B.S., Virginia Polytechnic Institute), Glade Spring, Va.  
 \*Michell, Arthur Stephen (B.S.F., University of Toronto), Toronto, Ont.  
 †Oliver, William Frazier, Jr. (B.S.F., University of Florida; M.S.F., University of Florida), Fort Myers, Fla.  
 \*Parker, James Austin (B.A., Mount Allison University; University of New Brunswick), Liverpool, Nova Scotia.

\* Registered for Master of Forestry Degree, 1951.

<sup>1</sup> Withdrew, November 10, 1950.

\*\* Registered for Master of Forestry Degree, 1952.

\* Withdrew, November 23, 1950.

\* Withdrew, September 27, 1950, to enter military service.

\*\* Registered for Doctor of Forestry Degree, 1951.

† Registered for Doctor of Forestry Degree, 1952.

‡ Withdrew, November 4, 1950.



- \*Phelps, William Robert (B.S., North Carolina State College), Monkton, Md.
- \*Phythyon, Hugh Reed (B.S., Allegheny College), Sharpsville, Pa.
- \*Powell, Louis William (B.S., Oregon State College), Medford, Ore.
- \*Pomeroy, Donald Alfred (B.S.F., University of Michigan), New London, Wis.
- \*Randall, Warren Robert (B.S., University of Idaho; M.S., University of Idaho), Corvallis, Ore.
- \*Ray, Philip Lancaster (B.S., University of Minnesota), Greenville, S. C.
- \*\*Rhett, Robert Barnwell (B.S., U. S. Naval Academy), Charleston, S. C.
- \*Riley, Walter Samuel (B.S., New York State College of Forestry), Weehawken, N. J.
- \*Santoro, Jean Claudio (B.S., University of Massachusetts), Franklin, Mass.
- \*Schwartz, Charles Murry (B.S., University of Connecticut), Norwich, Conn.
- †Smith, David V. (B.S.F., University of Georgia; M.F., Duke University), Lumpkin, Ga.
- \*Smith, Waring Wright, Jr. (B.S., Virginia Polytechnic Institute), Franklin, Va.
- \*Swensen, James Herbert (B.S., University of Massachusetts), Arlington, Mass.
- \*Thornton, Ernst Seemann (B.S.F., Louisiana State University), Huttig, Ark.
- †Turner, Ralph Gray (B.S., University of Richmond), Richmond, Va.
- \*Vande Linde, Frank (B.S.F., West Virginia University), Danville, W. Va.
- \*Wagoner, Howard Eugene (B.S.F., University of Maine), Guilford, Me.
- \*\*\*Warner, John Robinson (B.S., Duke University; M.F., Duke University), Walkersville, Md.
- \*Whitman, Joseph Atwood, Jr. (B.S.F., North Carolina State College), Glendon, N. C.
- \*Whitney, Richard Boardman (B.S., University of Maine), Thomaston, Me.
- \*Williams, Webster Douglas (A.B., Duke University), Moncks Corner, S. C.
- \*Wray, Clayton Junior (B.S., State College of Washington), Clearlake Oaks, Cal.
- \*Zahner, Robert (B.S., Duke University), Highlands, N. C.
- †Zak, Bratislav (B.S., Pennsylvania State College; M.F., Duke University), Pittsburgh, Pa.

#### STUDENTS OF FORESTRY IN THE GRADUATE SCHOOL OF ARTS AND SCIENCES

- Bryant, Ralph Clement (B.S., Yale University; M.F., Yale University), New Haven, Conn.
- Cox, Gene Spracher (B.S., Duke University; M.F., Duke University), Kingsport, Tenn.
- Wenger, Karl Frederick (B.S., University of Maine; M.F., Duke University), Buckingham, Va.

#### ACADEMIC-FORESTRY SENIORS IN THE SCHOOL OF FORESTRY

- Sliker, Alan William. Sabina, Ohio
- Sullivan, Edward James. Riverside, N. J.
- Walrond, Alan Lambert. Durham, N. C.
- Welsh, John F. Arlington, Va.



# Summary



## *Government, Administration, and Instruction*

GOVERNING BOARD .....	36
Trustees of Duke University .....	36
OFFICERS OF ADMINISTRATION .....	107*
The University .....	8
The Colleges and the Schools .....	25
Assistants in Administration .....	74
OFFICERS OF INSTRUCTION .....	614†
Professors .....	171
Associate Professors .....	83
Assistant Professors .....	151
Instructors .....	157
Part-time Instructors .....	26
Instructional Assistants .....	26‡
STAFF OF UNIVERSITY LIBRARIES .....	71
Total .....	824

\* Does not include duplications. An officer of administration who appears in more than one category is counted once.

† Does not include visiting members of the Summer Session Faculty. Does include officers of administration who hold academic rank.

‡ Does not include Graduate Assistants, Fellows, and Scholars, some of whom meet classes.

*Students*

## ENROLLMENT ON THE SEMESTER BASIS

<i>School or College</i>	<i>Fall Semester</i>	<i>Spring Semester</i>
COLLEGE OF ENGINEERING		
Regular Students .....	273	252
Special Students .....		
Total .....	273	252
TRINITY COLLEGE		
Regular Students .....	2164	1988
Special Students .....	15	19
Total .....	2179	2007
WOMAN'S COLLEGE		
Regular Students .....	1041	999
Special Students .....	45	65
Total .....	1086	1064
DIVINITY SCHOOL		
Regular Students .....	181	183
Special Students .....	8	3
Total .....	189	186
GRADUATE SCHOOL OF ARTS AND SCIENCES		
Regular Students .....	331	322
Special Students .....	54	45
Total .....	385	367
SCHOOL OF FORESTRY		
Regular Students .....	72	68
Special Students .....		
Total .....	72	68
SCHOOL OF LAW		
Regular Students .....	198	186
Special Students .....	5	1
Total .....	203	187
SCHOOL OF NURSING		
Regular Students .....	142	141
Special Students .....		
Total .....	142	141
<u>TOTAL ENROLLED ON SEMESTER BASIS</u>		
Regular Students .....	4402	4139
Special Students .....	127	133
Total .....	4529	4272

ENROLLMENT ON THE QUARTER BASIS

Medical School	Summer Quarter	Fall Quarter	Winter Quarter	Spring Quarter
Regular Students . . . . .	90	295	267	240
*Fellows . . . . .	45	45	45	45
*Interns . . . . .	44	44	44	44
*Assistant Residents . . . . .	75	75	75	75
*Residents . . . . .	19	19	19	19
TOTAL ENROLLED ON				
<u>QUARTER BASIS</u> . . . . .	273	478	450	423

MISCELLANEOUS TERMS

Course	Number of Students	Length of Term	Beginning of Term
Anesthesiology . . . . .	10	12 and 18 months	Registration Jan. 15
Dietetics . . . . .	10	12 months	Registration Sept. 1
Hospital Administration . . .	8	24 months	Appointments Jan. and July
Laboratory Technique . . . .	14	18 months	Registration Sept. 22
Physical Therapy . . . . .	12	15 months	Registration October
Physical Therapy: Psychosomatic . . . . .	2	6 months	Registration January
Record Library . . . . .	4	3 months	Registration Oct. 4
X-Ray Technology . . . . .	2	24 months	Appointments March and Oct.

SUMMARY: FALL AND SPRING ENROLLMENT

Fall Enrollment . . . . .	5047
Spring Enrollment . . . . .	4790

SUMMER ENROLLMENT

	Term I 6/14-7/22	Term II 7/6-8/12	Term III 7/23-8/31	July
Regular Students . . . . .	986	206	694	
Mycology . . . . .				13

\* Appointments are for a twelve-month (July 1-June 30) period and are so treated.

# Index

- Absences, 80
- Academic-Professional Combinations, 98
- Accountancy Courses, 109
- Activities, Undergraduate Student, 143
- Administration, Officers of, 23
  - Alumni Affairs, 26
  - Business Administration, 25
  - Educational Administration, 23
  - General Administration, 23
  - Public Relations, 26
  - Summary, 428
  - Summer Session, 312
- Admission
  - Divinity School, 209
  - Forestry School, 298
  - Graduate School, 162
  - Law School, 225
  - Medical School, 248
  - Nursing School, 273, 287, 289
  - Summer Session, 317
  - Undergraduate Colleges, 65
- Aesthetics Courses, 101, 176
- Air Force Reserve Corps, 84
- Air Science Courses, 105
- Alumni
  - Associations, 156
  - National Council, 156
  - Office, 156
  - Officers, 26
  - Organizations, 156
  - Publications, 156
- American History Courses, 187
- American Literature Courses, 115
- American Schools of Oriental Research, 206
- Anatomy Courses, 199, 251
- Ancient Languages Courses, 118, 123, 176
- Anesthesiology Program, 266
- Angier Duke Regional Prizes, 71
- Anthropology Courses, 135, 196
- Application for Admission
  - Divinity School, 209
  - Forestry School, 299
  - Graduate School, 162
  - Law School, 225
  - Medical School, 248
  - Nursing School, 273
  - Summer Session, 317
  - Undergraduate Colleges, 67
- Appointments Office, 86
- Arboretum, 295
- Art and Illustration, Medical, 269
- Art and Music Officers, 55
- Art Courses, 101, 176
- Assembly Meetings, 143
- Assistantships, 173, 297
- Assistants, Instructional, 53
- Athletics
  - Athletic Council, 147
  - Intercollegiate, 147
  - Participation in, 143
- Awards
  - Conferred, June, 354
  - Information on, 71
- Bachelor of Arts
  - Awarded, June, 344
  - Awarded, September, 353
  - Requirements, 88
- Bachelor of Divinity
  - Awarded, June, 349
  - Requirements, 211, 328
- Bachelor of Laws
  - Awarded, June, 349
  - Requirements, 230
- Bachelor of Science
  - Awarded, June, 347
  - Awarded, September, 354
  - Requirements, 93
- Bachelor of Science in Engineering
  - Awarded, June, 348
  - Awarded, September, 354
  - Requirements, 94
- Bachelor of Science in Medicine
  - Awarded, June, 348
  - Requirements, 247
- Bachelor of Science in Nursing Education
  - Awarded, June, 347
  - Awarded, September, 354
  - Requirements, 97, 281
- Bachelor of Science in Public Health Nursing, 290
- Bacteriology Courses, 253
- Bar Examinations, 228
- Bequests and Gifts, 158
- Biblical Studies Courses, 193, 215
- Biochemistry Courses, 199, 252
- Boarding Accommodations, 76
- Botany Courses, 105, 178, 329
- Broadcasting System, 149
- Bureau of Public Information, 157
- Bureau of Testing and Guidance, 85
- Business Administration Courses, 109, 181
- Business, Specialized Program in, 90
- Bylaws of the University, 15
- Calendar of the Colleges, 7
- Cancer Training Program, 261
- Candidacy for Advanced Degrees
  - Forestry School, 303
  - Graduate School, 163, 169, 171
  - Law School, 232, 233
  - Summer Session, 318, 325, 327
- Charter of the University, 14
- Chemistry Courses, 107, 179, 330
- Christian Convocation, 205
- Christian Thought Courses, 194
- Church History Courses, 194, 217
- Civil Engineering
  - Courses, 139
  - Degree in, 95
- Class Meetings, 143
- Class Size
  - Graduate School, 172
  - Summer Session, 329
- Class Standing, 78
- Commerce and Industry Courses, 110
- Commissions, Military
  - AROTC, 85
  - Awarded, June, 353
  - Medical, 244
  - NROTC, 84
- Composition Deficiencies, 81
- Conduct, 143, 228
- Corporation, University, 21
  - Executive Committee, 21
  - University Trustees, 21, 428
- Costs
  - Divinity School, 207
  - Forestry School, 297
  - Graduate School, 173
  - Law School, 228
  - Medical School, 250

- Nursing School, 275, 283, 287, 291  
 Summer Session, 320  
 Undergraduate Colleges, 68  
 Course Cards, 77  
 Course Load  
   Divinity School, 212  
   Graduate School, 165  
   Law School, 230  
   Summer Session, 319  
   Undergraduate Colleges, 78  
 Courses of Instruction, 101, 139, 176, 205,  
   215, 235, 245, 280  
 Accountancy, 109  
 Aesthetics, 101, 176  
 Air Science, 105  
 American History, 187  
 American Literature, 115  
 Anatomy, 199, 251  
 Ancient Languages, 118, 123, 176  
 Anthropology, 135, 196  
 Art, 101, 176  
 Bacteriology, 253  
 Biblical Studies, 193, 215  
 Biochemistry, 199, 252  
 Botany, 105, 178, 329  
 Business Administration, 109, 181  
 Chemistry, 107, 179, 330  
 Christian Thought, 194  
 Church History, 194, 217  
 Civil Engineering, 139  
 Commerce, 110  
 Dentistry, 258  
 Drama, 114  
 Economics, 108, 180, 330  
 Education, 111, 182, 331  
 Educational Psychology, 182  
 Electrical Engineering, 141  
 Elementary Education, 182  
 Engineering, 139, 333  
 English, 114, 184, 334  
 English Literature, 115, 184  
 European History, 187  
 Forest Botany, 107, 179  
 Forestry, 116, 185, 307, 335  
 French, 133, 195, 335  
 General Engineering, 142  
 Geology, 117, 335  
 German, 117, 186, 335  
 Government, 118, 129, 191, 339  
 Greek, 118, 176, 336  
 Gynecology, 259  
 Health, 119, 336  
 Health Education, 119, 336  
 Hematology, 200  
 History, 121, 187, 336  
 Laboratory Technique, 267  
 Latin, 123, 177, 337  
 Law, 238  
 Linguistics, 177  
 Mathematics, 124, 187, 337  
 Mechanical Engineering, 141  
 Medical Science, 125  
 Medicine, 245, 255  
 Microbiology, 199  
 Music, 102  
 Mycology, 253, 338  
 Naval Science, 126  
 Neuropsychiatry, 256  
 New Testament, 216  
 Nursing, 280  
 Nursing Education, 113, 184, 288, 333  
 Nutrition, 199  
 Old Testament, 215  
 Parasitology, 200, 261  
 Pastoral Care, 220  
 Pathology, 254  
 Pediatrics, 260  
 Pharmacology, 200, 253  
 Philosophy, 126, 189, 338  
 Physical Education, 119, 120, 336  
 Physical Therapy, 267  
 Physics, 128, 190, 339  
 Physiology, 200, 253  
 Political Science, 129, 191, 339  
 Preaching, 220  
 Psychology, 130, 192, 339  
 Public Health, 260, 290  
 Public Law, 238  
 Public School Administration, 183  
 Radiology, 259  
 Religion, 131, 193, 205, 340  
 Romance Languages, 133, 195, 335, 341  
 Russian, 135  
 Secondary Education, 183  
 Semitics, 178  
 Sociology, 135, 196, 340  
 Spanish, 133, 196, 341  
 Speech, 114, 221  
 Surgery, 256, 261  
 Theology, 131, 193, 215, 217, 340  
 Toxicology, 261  
 X-Ray Technology, 267  
 Zoology, 137, 197, 341  
 Credit  
   Graduate School, 169, 173  
   Summer Session, 318  
   Undergraduate Colleges, 78, 173  
 Degrees Conferred, June, 353  
   Bachelor of Arts, 342  
   Master of Arts, 349  
   Bachelor of Divinity, 349  
   Bachelor of Science, 347, 348  
   Doctor of Forestry, 351  
   Bachelor of Laws, 349  
   Master of Laws, 350  
   Doctor of Medicine, 350  
   Master of Education, 349  
   Master of Forestry, 349  
   Master of Religious Education, 348  
   Doctor of Philosophy, 351  
 Degrees Conferred, September, 362  
   Bachelor of Arts, 359  
   Master of Arts, 360  
   Bachelor of Science, 360  
   Master of Education, 360  
 Degrees, Requirements for  
   Bachelor of Arts, 88  
   Bachelor of Divinity, 211, 328  
   Bachelor of Laws, 230  
   Bachelor of Science, 93  
   Bachelor of Science in Engineering, 94  
   Bachelor of Science in Medicine, 247  
   Bachelor of Science in Nursing Educa-  
   tion, 97, 281  
   Bachelor of Science in Public Health  
   Nursing, 290  
   Doctor of Education, 171  
   Doctor of Forestry, 302  
   Doctor of Juridical Science, 233  
   Doctor of Medicine, 247  
   Doctor of Philosophy, 168, 324  
   Master of Arts, 164, 324  
   Master of Education, 166, 283, 326  
   Master of Forestry, 300  
   Master of Laws, 232  
   Master of Public Health, 293  
   Master of Religious Education, 213, 328  
 Dental School, Preparation for, 92, 258  
 Dietetics, School of, 265  
 Dining Service, 76  
 Discipline, 143  
 Divinity School, 300, 328  
   Admission, 209  
   American Schools of Oriental Research,  
   206  
   Application for Admission, 209  
   Bachelor of Divinity Degree, 211, 328,  
   349  
   Christian Convocation, 205  
   Courses, 215  
   Enrollment, 429  
   Fees, 207



- Library, 58, 81, 203
- Library Lectures, 204
- Living Accommodations, 207
- Master of Religious Education Degree, 213, 328
- Preparation for, 210
- Registration, 202
- Roll of Students, 413
- Scholarships, 205
- Student Government Association, 208
- Divinity School Library Staff, 59
- Doctor of Education, Requirements, 171
- Doctor of Forestry
  - Awarded, June, 351
  - Requirements, 302
- Doctor of Juridical Science, Requirements, 233
- Doctor of Medicine
  - Awarded, June, 350
  - Requirements, 247
- Doctor of Philosophy
  - Awarded, June, 351
  - Requirements, 168, 324
- Dormitories, 73, 75
- Drama Courses, 114
- Economics Courses, 108, 180, 330
- Educational Psychology Courses, 182
- Education Courses, 111, 182, 331
- Electrical Engineering
  - Courses, 140
  - Degree in, 94
- Elementary Education Courses, 182
- Elementary School Teaching, 91
- Emeriti, 22
- Employment, 73, 207, 250, 284
- Engineering
  - Courses, 139, 333
  - Degree in, 94
  - Enrollment, 429
  - Roll of Students, 384
- English Courses, 114, 184, 334
- English Literature Courses, 115
- Enrollment Statistics, 429
- European History Courses, 187
- Examinations
  - Doctoral, 169, 171, 303, 304
  - Master's, 166, 167, 326
  - Undergraduate, 67, 80
- Executive Committee, University, 21
- Expenses
  - Divinity School, 207
  - Forestry School, 297
  - Graduate School, 173
  - Law School, 228
  - Medical School, 250
  - Nursing School, 275, 283, 287, 291
  - Summer Session, 320
  - Undergraduate Colleges, 68
- Fees
  - Dissertation, 170
  - Divinity School, 207
  - Forestry School, 297
  - Graduate School, 173
  - Law School, 228
  - Medical School, 250
  - Nursing School, 275, 283, 287, 291
  - Summer Session, 320
  - Undergraduate Colleges, 67
- Fellowships, 173, 229, 297
- Forest Botany Courses, 107, 179
- Forest, Duke, 175, 296
- Forestry School, 294
  - Admission, 298
  - Application for Admission, 299
  - Arboretum, 295
  - Candidacy for Advanced Degree, 303
  - Combination Course, 98, 427
  - Courses, 116, 185, 307, 335
  - Doctor of Forestry Degree, 302
  - Duke Forest, 175, 296
  - Enrollment, 429
  - Fees, 297
  - Fellowships, 297
  - Library, 295
  - Living Accommodations, 298
  - Master of Forestry Degree, 300
  - Roll of Students, 426
  - Scholarships, 297
- Founders Day, 155
- Fraternities, 151
- French Courses, 133, 196, 335
- Freshman Class
  - Admission, 65
  - Rolls of Students, 356, 387, 424
- General Engineering Courses, 142
- Geology Courses, 117, 335
- German Courses, 117, 186, 335
- Gifts and Bequests, 158
- Government Courses, 118, 129, 191, 339
- Government of the University, 13
  - Bylaws, 15
  - Charter, 14
  - Indenture of Trust, 13
  - Officers, 21, 428
  - Retirement, 20
  - Sabbatical Leave, 19
- Grade Regulations
  - Divinity School, 212
  - Forestry School, 305
  - Graduate School, 172
  - Law School, 230
  - Nursing School, 282
  - Summer Session, 319
- Undergraduate Colleges, 79
- Graduate and Professional Schools
  - Officers, 24
- Graduate Record Examination, 162, 299
- Graduates School of Arts and Sciences, 162, 306, 323
  - Admission, 162
  - Application for Admission, 162
  - Assistantships, 173
  - Candidacy for Advanced Degrees, 163, 169, 171
  - Courses, 176
  - Credit, 169, 173
  - Doctor of Education Degree, 171
  - Doctor of Philosophy Degree, 168, 324
  - Enrollment, 429
  - Fees, 170, 173
  - Fellowships, 173
  - Living Accommodations, 174
  - Master of Arts Degree, 164, 324
  - Master of Education Degree, 166, 283, 326
  - Oak Ridge Institute, 175
  - Preparation for, 91, 164
  - Registration, 163, 323
  - Research Facilities, 174
  - Roll of Students, 402, 416, 427
  - Scholarships, 173
- Greek Courses, 118, 176, 336
- Greenhouses, 295
- Guidance, Bureau of Testing and, 85
- Gynecology Courses, 259
- Health
  - Courses, 119, 260, 289, 336
  - Officers, 55
- Health Education Courses, 119, 120
- Hematology Courses, 200
- High School Teaching, 91
- History Courses, 121, 187, 336
- History of the University, 8
- Honoraries, 150
- Honors
  - Conferred, June, 354

- Information on, 152
- Hospital
  - Description of, 263
  - Facilities, 243, 272
  - Medical Care, 146
- Hospital Administration. School of, 264
- Hours, Semester, 78
- Indenture of Trust, 13
- Institutes, Special, 322
- Instruction, Officers of, 26
  - Instructional Assistants, 53, 428
  - Instructional Staff, 26, 428
  - Part-time Instructors, 53, 428
  - Summary, 428
  - Summer Session Faculty, 313
- Intercollegiate Athletic Program, 147
- Junior Class Roll
  - College of Engineering, 385
  - Nursing School, 425
  - Trinity College, 371
  - Woman's College, 394
- Laboratories, 174, 322
- Laboratory Technique Courses, 267
- Language Requirements
  - Bachelor of Arts, 88, 324
  - Bachelor of Science, 93
  - Doctor of Forestry, 303
  - Doctor of Philosophy, 168
  - Master of Arts, 88, 324
- Latin Courses, 123, 177, 337
- Law School, 224, 255, 261
  - Admission, 225
  - Application for Admission, 225
  - Bachelor of Laws Degree, 230
  - Bar Examinations, 228
  - Candidacy for Advanced Degrees, 232, 233
  - Combination Course, 99, 226
  - Conduct, 228
  - Courses, 235
  - Doctor of Juridical Science Degree, 233
  - Enrollment, 429
  - Fees, 228
  - Fellowships, 229
  - Legal Aid Clinic, 53, 224
  - Library, 59, 81
  - Living Accommodations, 299
  - Loans, 299
  - Master of Laws Degree, 232
  - Preparation for, 92
  - Registration, 232
  - Roll of Students, 416
  - Scholarships, 229
  - Veterans, 226
- Law School Library Staff, 59
- Lectures
  - Divinity School Library, 204
  - Public, 145, 204
  - University, 155
- Legal Aid Clinic
  - Information on, 224
  - Staff, 53
- Libraries, Staffs and Descriptions, 56, 81, 428
  - Departmental, 81, 174, 243
  - Divinity, 59, 81, 203
  - Engineering, 81
  - Forestry, 295
  - Law, 59, 81
  - Medical, 59, 81, 243, 268, 273
  - Nursing, 273
  - University, 57, 81, 174, 203, 243, 273, 322
  - Woman's College, 59, 83, 273
- Linguistics Courses, 177
- Living Accommodations
  - Divinity School, 207
  - Forestry School, 298
- Graduate School, 174
- Law School, 229
- Medical School, 250
- Nursing School, 284, 287
- Summer Session, 320
- Undergraduate Colleges, 73, 75
- Loan Funds, 72, 208, 229
- Master of Arts
  - Awarded, June, 349
  - Awarded, September, 354
  - Requirements, 164, 324
- Master of Education
  - Awarded, June, 349
  - Requirements, 166, 283, 326
- Master of Forestry
  - Awarded, June, 349
  - Requirements, 300
- Master of Laws
  - Awarded, June, 350
  - Requirements, 232
- Master of Public Health, Requirements, 291
- Master of Religious Education
  - Awarded, June, 368
  - Requirements, 213, 328
- Mathematics Courses, 124, 188, 337
- Matriculation, 77
- Mechanical Engineering
  - Courses, 141
  - Degree in, 94
- Medals, 152
- Medical Art and Illustration Division, 269
- Medical Care, 145, 228, 244, 287
- Medical Record Library, 268
- Medical School, 242
  - Admission, 248
  - Anesthesiology Program, 266
  - Application for Admission, 248
  - Bachelor of Science in Medicine Degree, 247
  - Cancer Training Program, 261
  - Courses, 245
  - Dietetics, School of, 265
  - Doctor of Medicine, 247
  - Enrollment, 430
  - Fees, 250
  - Hospital Administration, School of, 264
  - Laboratory Technique Courses, 267
  - Library, 59, 81, 243, 268, 273
  - Living Accommodations, 250
  - Medical Art and Illustration Division, 269
  - Medical Care, 244
  - Medical Social Service, 265
  - Military Science, 244
  - Nursing School, 265
  - Physical Therapy, 267
  - Preparation for, 92, 248
  - Record Library, 268
  - Roll of Students, 439
  - Student Government, 244
  - X-Ray Technology, 267
- Medical School Library Staff, 59
- Medical Science Courses, 125
- Medical Social Service, 265
- Medicolegal Instruction, 255, 261
- Microbiology Courses, 199
- Military Science
  - Medical School, 244
  - Undergraduate Colleges, 83
- Musical Organizations, 151
- Music and Art Officers, 55
- Music Courses, 102
- Mycology Courses, 253, 338
- National Council of Duke University, 156
- Naval Reserve Corps, 83
- Naval Science Courses, 126
- Neuropsychiatry Courses, 256
- New Testament Courses, 216
- Nursing Diploma
  - Awarded, June, 348
  - Awarded, September, 354

- Information on, 277
- Nursing Education
  - Courses, 113, 184, 288, 333
  - Degree in, 97, 281
- Nursing School, 100, 265, 272
  - Admission, 273, 287, 289
  - Application for Admission, 273
  - Bachelor of Science in Nursing Education, 97, 281
  - Bachelor of Science in Public Health Nursing, 290
  - Combination Course, 100, 278
  - Courses, 280
  - Diploma, 277, 348, 354
  - Enrollment, 429
  - Fees, 275, 283, 287, 291
  - Library, 273
  - Living Accommodations, 284, 287
  - Master of Education, 283
  - Master of Public Health, 292
  - Medical Care, 287
  - Medical Program, 285
  - Nursing Education Division, 97, 113, 184, 281, 288, 333
  - Operating Room Program, 286
  - Preparation for, 274
  - Psychiatric Program, 284
  - Roll of Students, 424
  - Surgical Program, 285
  - Woman's College, 278
- Nutrition Courses, 199
- Oak Ridge Institute of Nuclear Studies, 175
- Officers of Administration, 23
  - Alumni Affairs, 26
  - Business Administration, 25
  - Educational Administration, 23
  - General Administration, 23
  - Public Relations, 26
  - Summary, 428
  - Summer Session, 312
- Officers of Instruction, 26
  - Instructional Assistants, 53, 428
  - Instructional Staff, 26, 428
  - Part-time Instructors, 53, 428
  - Summary, 428
  - Summer Session Faculty, 313
- Old Testament Courses, 215
- Organizations, Undergraduate Student, 149
- Orientation Program, Undergraduate, 77
- Parasitology Courses, 200, 261
- Participation in Activities, 143
- Pastoral Care Courses, 220
- Pastors' School, 206
- Pathology Courses, 254
- Pediatrics Courses, 260
- Pharmacology Courses, 200, 253
- Philosophy Courses, 126, 189, 338
- Physical Education
  - Courses, 121, 122, 336
  - Requirements, 147
  - Staff, Trinity College, 53
- Physical Education and Student Health Officers, 55
- Physical Therapy Courses, 267
- Physics Courses, 129, 191, 339
- Physiology Courses, 200, 253
- Political Science Courses, 131, 192, 339
- Preaching Courses, 220
- Prizes
  - Awarded, June, 354
  - Information on, 71, 152, 206
- Psychology Courses, 130, 192, 339
- Publication of Dissertation, 170
- Publications
  - Alumni, 156
  - Board, 149
  - Student, 149
- Public Health Courses and School, 260, 289
- Public Information, Bureau of, 157
- Public Law Courses, 238
- Public Relations Officers, 26
- Public School Administration Courses, 183
- Quality Credit, 78
- Quantity Credit, 78
- Radiology Courses, 259
- Registration
  - Divinity School, 207
  - Graduate School, 164, 323
  - Law School, 227
  - Summer Session, 321
  - Undergraduate Colleges, 77
- Regulations, Academic, 77, 78
- Religion Courses, 132, 194, 205, 340
- Religious Life
  - Program, 144, 204
  - Staff, 54
- Religious Work, Specialized Program in, 90
- Research, Encouragement of, 174, 322
- Reserve Officers Training Corps, 83
  - Air Force, 84
  - Naval, 83
- Residence Requirements
  - Divinity School, 212
  - Forestry School, 302, 303
  - Graduate School, 165, 169, 171
  - Law School, 230, 234
  - Summer Session, 317
  - Undergraduate Colleges, 79
- Residence Staff, 56
- Retirement, 20
- Roll of Students, 356
- Romance Languages Courses, 133, 195
- Roster of Students, 344
- ROTC's, 83
  - Air Force, 84
  - Naval, 83
- Russian Courses, 135
- Sabbatical Leave, 19
- Scholarships
  - Divinity School, 205
  - Forestry School, 297
  - Graduate School, 173
  - Law School, 229
  - Undergraduate Colleges, 70
- Secondary Education Courses, 183
- Semester Hours, 78
- Semitics Courses, 178
- Senior Class Roll
  - College of Engineering, 386
  - Nursing School, 425
  - Trinity College, 377
  - Woman's College, 397
- Size of Classes
  - Graduate School, 172
  - Summer Session, 329
- Social Functions, 145
- Social Service, Medical, 265
- Social Work, Specialized Program in, 91
- Sociology Courses, 135, 196, 340
- Sophomore Class Roll
  - College of Engineering, 384
  - Trinity College, 364
  - Woman's College, 391
- Sororities, 151
- Special Students
  - Information, 67
  - Roll, 383, 400
- Spanish Studies
  - Courses, 133, 196, 341
  - School of, 320, 341
- Speech Courses, 114, 221
- Student Activities Offices, 148
- Student Government Associations
  - Divinity School, 208
  - Medical School, 244
  - Undergraduate Colleges, 178
- Students, Roll of, 356
  - Divinity School, 413

- Engineering College, 384
- Forestry School, 426
- Graduate School, 402, 416, 427
- Law School, 416
- Medical School, 439
- Nursing School, 424
- Trinity College, 356
- Woman's College, 387
- Summary of Officers, 428
- Summer Session, 87, 175, 312
  - Administrative Officers, 312
  - Admission, 217
  - Application for Admission, 317
  - Courses, 329
  - Credit, 318
  - Doctor of Philosophy Degree, 324
  - Enrollment, 439
  - Examinations, 326
  - Faculty, 313
  - Fees, 320
  - Graduate School, 323
  - Institutes, 322
  - Living Accommodations, 320, 327
  - Master of Arts Degree, 324
  - Master of Education Degree, 326
  - School of Spanish Studies, 320, 341
- Surgery Courses, 256, 261
- Teaching, Specialized Program in, 91
- Testing and Guidance, Bureau of, 85
- Tests, Preliminary, 67
- Theology Courses, 131, 193, 215, 217, 340
- Theses
  - Doctor of Forestry, 304
  - Doctor of Philosophy, 170
  - Master of Arts, 165, 326
  - Master of Education, 166, 327
  - Master of Forestry, 301
- Toxicology Courses, 261
- Transcripts, 69, 173, 297
- Transfer Students
  - Graduate School, 165
  - Summer Session, 319, 325
  - Undergraduate Colleges, 66
- Trinity College Enrollment, 356, 429
- Trustees, 21
- Undergraduate Colleges, General Statement, 62
- Units of Admission, 65
- University Press Staff, 54
- Veterans, 226
- Woman's College Enrollment, 387, 429
- Woman's College Library Staff, 59
- X-Ray Technology Courses, 267
- Zoology Courses, 137, 197, 341









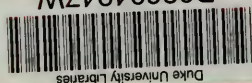
Tr.R. 378.756 D877HA v.23  
1950-51 603484

# Bulletin

ISSUED TO

Tr.R. 378.756 D877HA v.23  
1950-51 603484

BOUND BY  
**SEEMAN**  
PRINTERS AND BINDERS



Duke University Libraries

D02604947W